THE

CONTRACT JOURNAL

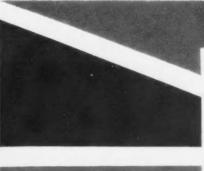
INCORPORATING

THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

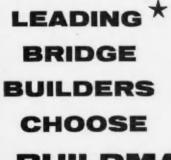
No. 4,285 83rd YEAR

THURSDAY, AUGUST 10, 1961

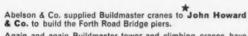
PRICE 2/-











Again and again Buildmaster tower and climbing cranes have been chosen for their rugged reliability. Using Buildmaster cranes

- ★ Cleveland Bridge & Engineers Co. built the Samlesbury Bridge near Preston.
- * Sir Lindsay Parkinson built the Lune Bridge near Lancaster.
- ★ Tarmac Ltd. built the Homs Bridge and Bridstow near Ross.

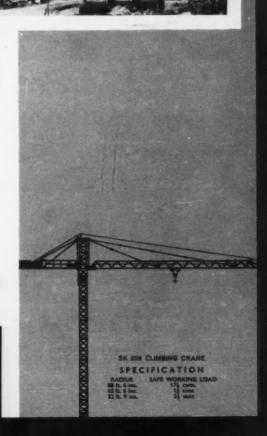
 Abelson also supplied the 40-ton Derrick to build the Barton
 High Road Bridge at Widnes, and the 100-ton gantry for the
 Hobart Bridge in Tasmania.

ABELSON · SHELDON · BIRMINGHAM 26

Telephone: SHELDON 2424 (10 lines)

ABELSON

& CO. (ENGINEERS) LIMITED



Dig-Doze-Scrape-Grab FASTER

-more easily --more economically

with the

The International T.D.9 (92 series) Drott has already proved its worth and is now available here in quantity. Its smooth constant power is drawn from the DT.282 turbocharged, 6 cylinder diesel engine which has unmatched economy and all-weather direct push button starting. With the popular 4 in 1, $1\frac{1}{2}$ cu. yd. bucket and longer track frames, this outfit is extremely stable and easy to operate under all conditions, offering unlimited scope in its applications and presenting real value for money at its current price.

It is backed by the unrivalled service from Cripps who will gladly send you full particulars on request.



GRIPPS

For Construction Equipment — the finest on tyres and tracks

R. CRIPPS & COMPANY LIMITED

NOTTINGHAM Tel: 71161. MANCHESTER Tel: Trafford Park 1658. SHILDON Tel: 261



ESTABLISHED 1891 — CONTRACTORS TO H.M. GOVERNMENT • YOU CAN RELY ON OUR SERVICE — PROVED OVER 60 YEARS

A BUILDER'S BEST FRIEND IS A FORD ENGINE

Equipment powered by a Ford Industrial engine starts with two major advantages—the heart of it is a tough, hard-working, reliable power-unit built to the most modern designs, and behind it is the famous Ford Service Organisation—a world-wide chain of factory-trained engineers with stocks of genuine Ford parts.

Cranes, Excavators, Dumpers, Loaders, Compressors, Generators, Pumps—all are available with Ford power-units, petrol or diesel.

Please send the coupon below for details of the Ford-powered equipment you are interested in.





Please send me details of Ford-powered equipment of the following types

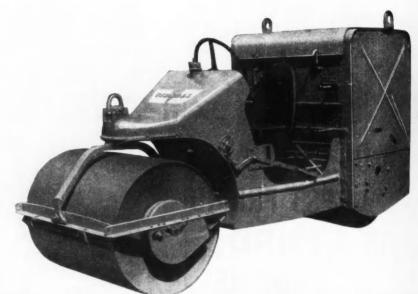
Type or class of equipment

YOUR FIRM'S NAME

For the attention of Mr.

ADDRESS

SUPPLEMENT



LIMITED



First is the S & P Vibroll—the lightweight roller that makes a lasting impression wherever it's used. Its patented system of vibratory rolling compacts sand, ballast, ashes, asphalt, tarmacadam, gravel, noncohesive soils and dry mix concrete with an efficiency better than that of a deadweight roller many times its circ its size.

The Vibroll illustrated above, th: 32RD, is powered by a 6½ h.p. diesel engine, with a roll 32" wide, and weighs just over a ton. It is one of an extensive range of Vibroll models which have rolling widths from 11"-72".

Second suggestion is the S & P 7T Hydraulic tilting-drum Mixer designed by this company who originated the basic principles of modern mixing practice. It is the first mixer to be produced with patented hydraulic drum transmission gear which, by the elimination of clutches, reduces maintenance to a minimum. Note: — features include built-in highly efficient weigh batching mechanism, accurate water control by meter, exceptionally high angle skip discharge, simple hydraulic control of skip, Ackerman steering and all steel drum.



Please write for further details.

STOTHERT & PITT LTD ENGINEERS · BATH · ENGLAND

London Office: 38 Victoria Street, London S.W.1 · Midlands Office: Lightning Way, Alvechurch Rd., West Heath, Birmingham 31

U D



Our **Business** İS the **Buying** and Selling Marine Craft



Not only do we act as Shipbrokers, we do, at the same time, hold in our own name a wide range of Craft for Immediate Inspection and Sale. We are particularly interested in the fulfilling of Marine Contracts and are always available for discussion in connection with the purchase of laid-up Commercial Craft, Dredging and Marine Equipment.

If YOU have a Marine Problem consult:



JOHN BRENT & CO.

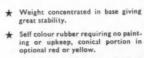
(Shipbrokers) Ltd.
Mitre Chambers,
Mitre Street,
London, E.C.3

Telephone: AVEnue 5171 (3 lines)

COLORCONES

SUPPLEMENT





Detachable conical portion held by four rubber grommets facilitating re-placement or renewal of reflecting material.

Scotchlite reflecting tape can be fitted as desired. Illustration shows 24" red band at top and 4" white band at

Height of cone as shown 18". Cones 24" high can be supplied to fit the same base at a small extra charge.



Colorcones are ideal for marking Motorways or other roads for repairs, breakdowns, accidents, etc., they include the exclusive special features mentioned above.

> PRICE 19/6 24" PRICE 25/-

PUBLIC WORKS PRODUCTIONS (COVENTRY) LTD. 8 STATION ROAD KENILWORTH Telephone: Kenilworth 540

VIBRATING **TAMPERS VIBRATORS** CROPPERS ROTARY **FLOATS** LIFT & FORCE PUMPS **VIBRATORS** EXTERNAL **VIBRATORS**

HIRE WITH OPTION TO PURCHASE

ALLAM MACHINERY HIRE LTD.

132-135 SLOANE STREET, S.W.I Telephone: SLOane 9976 (5 Heat) SCOTLAND: 39 Onvendish Street, Blasgow, C.S. Telephone: South 0186

Available For Long or Short Term Hire

Cranes: 5 ton Coles and 22RB with 80ft. Jib

and Fly Jib
New "Smith 21" Crawler Crane with
80ft. Jib and Fly Jib or Deep Digging

Trencher Excavator.

Rollers: 21 ton and 5 ton

Bromag Vibrating Roller

Bulldozers: Bristol 25, D4 with Scraper

Digger: New Dinkum 60 with fore end loader and digging Buckets from 18" up to 54"

Loaders: New Muir-Hill FD4 Loader with

I cu. yd. Bucket

Compressor: Consolidated 120 with 2 Tools,

"500" with 6 Tools

Pile Driver: Delmag D5

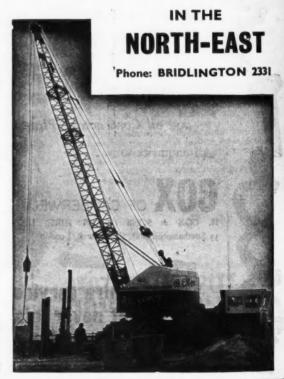
Road Surfacer: Barber-Greene

Pumps: 4" x 6"

Pneumatic Concrete Placer

91a MARTON ROAD, BRIDLINGTON, YORKSHIRE

Serving CONTRACTORS and MUNICIPAL AUTHORITIES



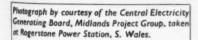
S

A BIG BITE

3 cu.yd. DROTT

For the BIG project

B-20K3



SAVILLE

A Company of the LUMLEY-SAVILLE Organisation.

(TRACTORS) LIMITED

STRATFORD-ON-AVON

Telephone: 4242 (15 lines) Telex. Birmingham 31633

SALISBURY Telephone: 6444 (5 lines)

LONDON

Tel: ASHFORD (Middx.) 4191 (10 lines) Telex. London 24117

BELFAST

Tel: DUNMURRY 2511 (4 lines) Tel: STOKE-CANON 363

CARDIFF

Tel: CARDIFF 33572/3 Telex. Cardiff 49250

EXETER



EIRE: Sole Distributors for INTERNATIONAL HARVESTER, J. H. SAVILLE & CO. LTD. Tel: DUBLIN 373606 (5 lines)

SUPPLEMENT





DAVID BROWN

TRACTORS (SALES) LIMITED MELTHAM • HUDDERSFIELD • YORKSHIRE • PHONE: MELTHAM 3617

A subsidiary of the David Brown Corporation Limited

961

re-

um

cial

rd;) ft.

vid TD ors

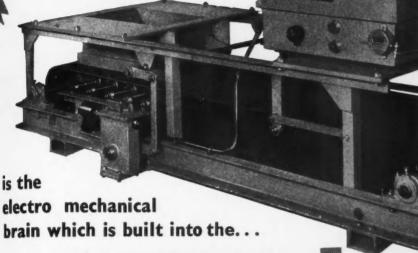
der zer

for

3611



READY MIXED CONCRETE PLANT CIVIL ENGINEERING PLANT



SIMDINE CONTINUOUS BATCHING AND MIXING PLANT

* NO WEIGH LEVERS TO PULL!

* NO WEIGH BUTTONS TO PUSH!

* TOTAL ELIMINATION OF HUMAN ELEMENT IN WEIGHING!

WRITE NOW FOR FULL DETAILS OF THIS RANGE OF PLANT

& Mixing Plant designed to deliver a continuous output of mixed concrete into cruckmixers or agitators OF ANY SIZE at the rate of up to 3 CU. YDS per minute.



RICHARD SIMON & SONS LTD.
PHOENIX WORKS

VERNON RD. BASFORD NOTTINGHAM

SIMDINE DEPT. TEL. NOTTM. 88261-2-3



★ FUEL COST 10/- A DAY

POWERFUL TRACTION

★ FULL 180° LOCK

*

*

TURNS IN 13' RADIUS

* HYDRAULIC STEERING

ARTICULATED FRAME

* REINFORCED STEEL BODY

COMPLETE LOAD DISCHARGE

LARGE TWIN TIPPING RAMS

HEAVY EARTH MOVER TYRES

POWERFUL AIR BRAKES

HIGH GROUND CLEARANCE

PERFECT VISIBILITY FROM FIBRE GLASS CAB

WHITLOCK BROS. LTD. GREAT YELDHA

*

*

*

*

*

*

DINIPER 10/8/11 PER 10/8/11 PE





Start of the tip—after tipping, the body is quickly returned to normal with

WHITLOCK ALSO PROVIDE THE ONLY COMPLETE RANGE OF HYDRAULIC EXCAVATORS

Tel. GT. YELDHAM 305 (8 lines)



Simply dial the pressure required—and the Joy-Sullivan ingenious Servair Demand Control system ensures that discharge air pressure cannot fluctuate ± 10 p.s.i. The indicator visually reminds the operator of pressure settings between 65 and 125 p.s.i.



JOY-SULLIVAN LTD

7 HARLEY STREET, LONDON W.1.

SUPPLY & APPLY AIR POWER

makes it possible for an RP.600 compressor to produce

only enough air to run a medium paving breaker whilst maintaining a constant r.p.m. and discharge pressure.

This is one of the many superior design features of Joy-Sullivan rotary portable air compressors. Read all

about these machines in Publication AD/4 and AD/5.

PC/5



LOCAL AUTHORITIES & JOBBING BUILDERS CHOOSE THE FAMOUS



TRAILEX JUNIOR



Petrol or diesel engine driven . . . gives a perfect mix -with an unmixed batch capacity of five cubic feet, and an output of up to twenty batches per hour. Never idle, fast towing from site to site. Non-towing models in 3½ T and 5T sizes on steel or pneumatic tyred wheels. Petrol or diesel engine driven.

HIRE PURCHASE TERMS...ONLY 10% DEPOSIT

Please send	full	details	of	items	marked	.X.

O GADET MIXER O HOPPE O NON-TILT MIXERS O K MACHINE O ROUGHRIDER

NAME

ADDRESS

THE LINER CONCRETE MACHINERY CO. LTD.

283 PARK ROAD, GATESHEAD, 8. Phone: 72501.

London Office & Showrooms: Liner House, Lexden Road, Acton, W.3. Phone: ACOrn 8931



Pearson Machine Tool Co. Ltd. are now producing entirely British built luffing type, rail mounted, travelling Tower Cranes. The REX as shown above is now available from stock. Price includes first erection, and Pearson's well-established reputation for service will be at the disposal of users.

The specification of these outstanding cranes is in full compliance with BSS 2799.

MODEL	RADIL	JS (ft)	CAPAC	MAX.	
HODEL	Max.	Min.	Max.	Min.	(ft)
PERKY	43	20	25	13	80
TITAN	52	20	33	17	100
REX	77	28	49	21	140
GIANT	89	34	59	27	170
МАММОТН	98	38	58	32	200

British Built under licence from EWK, WEST GERMANY

PEARSON MACHINE TOOL CO. LTD.

CRANE DIVISION

WALKER, NEWCASTLE UPON TYNE, 6. Telephone: Wallsend 625101 (6 lines)



WE HIRE

SELL and REPAIR

Theodolites, Levels, Staves, Ranging Rods, Chains and Arrows, Steel Tapes, etc.

Modern instruments bought or taken in part exchange.



DEPT. CJ, 338 HIGH HOLBORN, LONDON, W.C.I (Opposite Gray's Inn Road) Phone: HOLborn 2149



CONSULT PUMPIRE IMITE

112 Jermyn Street, S.W.I. Phone: TRA 2665 Finchley Road, Hampstead, N.W.3. Telephone: TRA 2663

LEICESTER

Tudor Works, Bradgate St. Telephone: Leicester 21512 MANCHESTER

Cheviot St., Cheetham Telephone: BLA 6318

SURREY

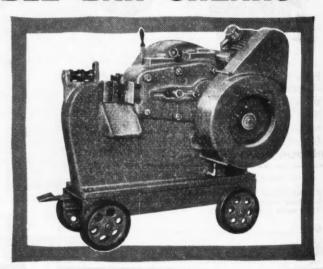
Byfleet Works, Byfleet. Telephone: Byfleet 46401

PORTABLE BAR SHEARS

Model BETON is made in four sizes-B 32, B 40, B 50, B 60. Compact and sturdy, they are Ideal for site work. Electric motor drive, standard; petrol or diesel engine when required.

CAPACITY SPECIFICATION B 32 B 40 B 50 B 60 2" M.S. Round 11" 1 9 " 23" M.S. Square 1 3 " 13" 216" M.S. Flat (with special blades) $2\frac{3}{8}$ × $\frac{3}{8}$ $2\frac{3}{4}$ × $\frac{11}{16}$ 4 × $\frac{7}{8}$ 5 $\frac{7}{16}$ × $\frac{11}{16}$ Steel Round (38 tons/sq. inch) 116" 2"

Further details and full specification from



SOLE DISTRIBUTORS IN THE UNITED KINGDOM

THOS. W. WARD LTD

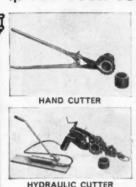
ALBION WORKS · SHEFFIELD · PHONE :- 26311 (22 LINES)

LONDON OFFICE: BRETTENHAM HOUSE LANCASTER PLACE STRAND W.C.2. PHONE: TEM. 1515

Introducing the NEW

PORTER-WHEELER PIPE CUTTERS

* CUT YOUR CUTTING COSTS



No vice - No turning - Just wrap chain around pipe, apply pressure and the pipe is cut. Time - one or two minutes according to model used. One man operation-Cuts Spun Iron and W.M. Pipes, Cast Iron Drain, Soil and Rainwater, also Stoneware and Pitch Fibre, etc. Sizes - 2" to 6" diameter cut with Hand Model and 6" to 18" diameter with the Hydraulic Model.

WINSER LIMITED

SHEpherds Bush 8791 (10 lines)

CAST IRON DRAINAGE MERCHANTS

• (PATS. ISSUED AND PENDING) • • • •

FOR SALE RHIR

- 3. Caterpillar 619 Motor Scrapers with 52A Caterpillar D.8 Torque Pusher.
- 2. TS 24 Euclid Motor Scrapers. These machines are in first class condition having done only 9 months work.
- 1. D.9 Caterpillar cable operated Angle Dozer. This machine has just been fitted with new tracks, rollers and sprockets and is in first class condition.

Several D.7s and D.8s Caterpillar operated Bulldozers.

Wanted

10, 19 and 22 R.B. modern Excavators with any equipment, also 10 R.B. and 19 R.B. shovel equip-

MARK SHEEHY LTD. OAKERTHORPE, DERBYS.

Telephone Alfreton 475

You get so much more

from JOHNSON

POKER VIBRATORS

- High Frequency-10,000 V.P.M.-Large Amplitude.
- Highest Acceleration-150 G.
- Maximum, rapid compaction of harsh mixes.
- "Hi-G" super-flexible shaft runs in ball bearings
 —stands up to rough handling
 —extendible up to 36ft.

 - Three Poker Sizes-11in., 21in. and 31in. dia.
- Diesel-Petrol-Electric.
- Service and Spares within 24 hours.
- Ask for a demonstration now.

EXAMPLES OF MODELS AVAILABLE

	MODEL 3D	MODEL 3	MODEL 3A	MODEL 3C
Engine	Lister LD1 Diesei	Villiers Mk. 40 Petrol	Villiers Mk. 25 Petrol	Villiers Mk. 15H.S. Petrol
Poker Sizes	3½in. 2¾in. 1½in.	3½in. 2½in. 1½in.	23in. 13in.	21in. 11in.
Shaft	Up to 36ft.	Up to 36ft.	Up to 24ft.	Up to 24ft.

Machines are supplied with 12ft. shaft. 12ft. Extension Shafts and Couplings extra. Pokers extra.



OUALITY PAYS

C. H. JOHNSON (Machinery) LTD · STOCKPORT · CHESHIRE Tel: STOckport 2642/5 Telex 66-297 Grams: "Machinery" Stockport

FOR DUMPERS MUD PUMPS CENTRIFUGAL PUMPS POWER RAMMERS POKER VIBRATORS SCREED VIBRATORS FIXED AND MOBILE CONVEYORS Landon Sales and Service Depot: 38/44 Lower Richmond Road, S.W.14. Tel; PROspect 7671

Scottish Spares and Service Deput: 119 Whitefield Rd., Govan, Glasgow, S.W.I. Tel; Govan 2781

For Surveying Equipment contact *

CHADBURNS

Permanent display of levels and theodolites and surveying instruments by all leading British and Continental manufacturers in extensive Optical Showrooms.

Chadburns are appointed Area Stockists for ZEISS - Western Germany KERN - Switzerland STANLEY - London

and North of England agents for: SURVEY & GENERAL INSTRUMENT CO. LTD · LONDON W.C.1

LEVEL AND THEODOLITE REPAIRS A SPECIALITY



CHADBURNS (LIVERPOOL) LTD 31 Brunswick Street, Liverpool, 2. Tel: CENtral 4844



CROWN ENGINEERING WORKS SWADLINCOTE BURTON-ON-TRENT TELEPHONE: SWADLINCOTE 7588.

SELWOOD, Chandler's Ford, Hants.





DROTT SKID SHOVELS

Be sure of good service! Hire from THE LARGEST PLANT HIRE FLEET IN BRITAIN!

for HIRE

from

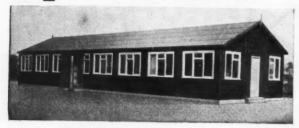
GEORGE COHEN

PLANT HIRE SERVICE



WOOD LANE, LONDON, W.12 Telephone: Shepherds Bush 2070 • STANNINGLEY, Nr. LEEDS. Telephone: Pudsey 2241 • KINGSBURY, Nr. TAMWORTH. Telephones: Ashfield 1191/2/3 and Hurley 281/2 • MANCHESTER. Telephone: Pendleton 4411/6 • NEWCASTLE. Telephone: Newcastle 23313 • SHEFFIELD. Telephone: Sheffield 42033 • GLASGOW. Telephone: Langside 6131 • SWANSEA. Telephone: Swansea 71741 • SOUTHAMPTON. Telephone: Southampton 26116/9 • BELFAST. Telephone: Belfast 58211/2 • BATH. Telephone: Bath 5353

space to <u>your</u> specification



PEELS
Prefabricated
Buildings

Whether you require a site office, a large construction store, or a building extension, PEELS can meet your requirements, either with a prefabricated building from their vast range, or with a design exactly to your specification. This PEEL Contractor's Office is a typical example of a well designed durable building.

H. Peel Limited, Dept. C.J., Sowerby Bridge, Yorkshire. Telephone: Halifax 81211.

FOR HIRE

Traxcavators - - - 955 C's $l\frac{1}{2}$ cu. yd.

" " - - - 955 F's $l\frac{1}{2}$ cu. yd.

" " - - - 955 H's 2 cu. yd.

Drott Skid Shovels - - - I cu. yd.

" " - - 4 In one

Excavators and Backacters

Shawnee Poole Dumpers and Tip Lorries

Lowloading Transporter

FOR MODERN PLANT AT MODERATE RATES WITH FIRST CLASS SERVICE

ALSO SITE WORKS AND BULK EXCAVATIONS ON CONTRACT IF DESIRED

G. M. EDMUNDS LTD.

Plant Contractors
Phone: ASHCOTT 250 & 342
Nr. Bridgwater, Somerset.

safety on the road



in frost and icy conditions with the

PHŒNIX

OHIO-DORSET FROST GRITTER

The Ohio-Dorset Frost Gritter, a new machine developed for spreading sand, grit, etc., on roads during frost and snow, can be fitted to any tipping truck in place of the tail board. Controlled by the driver in the cab, it gives a maximum width of spread of 20 feet.

PHENIX

THE PHŒNIX ENGINEERING COMPANY LIMITED PHŒNIX WORKS, CHARD, SOMERSET. Telephone: Chard 3226

London Office: 10 NORFOLK STREET, LONDON, W.C.2. Telephone: COVent Garden 0315/7



CARISON SOR HIRE

Mobile

ne pads

- Portable
- Stationary
- Diesel and Electric
- 18 to 630 cu. ft. f.a.d.



CONTACT US FOR SERVICE

CONTRACTORS SERVICES LTD

65 EFFRA ROAD, LONDON 5.W.2

TELEPHONE BRIXTON 4081

⊕cs2e

FOR SALE

TRACTORS

52A D8 Angledozer and Rippers.
22A D8 Bulldozer.
1H D8 L.T. Winch.
BTD20 and BTD6 Hydraulic Angledozers.
BTD20 and BTD6 4-in-1 Drotts.

LOADING SHOVELS

Michigan 75A and 175A.

EXCAVATORS

19RB and 20RB Priestman Cubs.

COMPRESSORS

Broomwade 120 and 210 c.f.m. Broomwade 210 c.f.m. Truck-mounted. C.P.T. 500 Climax 315 c.f.m. Holman Tractaire, Mackay DAC 130.

DRILLING PLANT

Halco Stenuick Down-the-Hole. Holman Vole Tractor-mounted.

ROLLERS

Aveling 8-ton 3-wheel, 7-ton Tandems. A.B.G. 2-ton, 4-ton Vibrating. Stothert & Pitt Ped. and Tandem Vibrating.

DUMPERS

Johnson Standard and Det Skip.

MIXER!

Benford 18/12, 7/5, $5/3\frac{1}{2}$.

GENERATORS

22, 50, 55 KVA 440-Volt. 3, 5, 24 KVA 110-Volt.

PORTASILOS

20-ton and 30-ton capacity.

CONCRETE PUMP PLACERS

Blaw Knox 6in. C.P.O.A.C. 6in.

PUMPS

Sykes Univacs, Pegson 2in. Wickham 3in. x 4in. Diaphragm. Mono 3in. Rapier 3in. Fire Pumps.

GRADERS

Aveling Austin 99H.

MISCELLANEOUS

Pneumatic and Electric Tools Equipment. Vibrators, Buckets, Trucks, etc., etc.

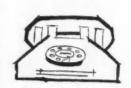
CUBITTS FITZPATRICK SHAND

DONCASTER MOTORWAY WARMSWORTH



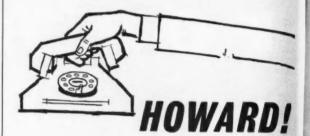
Telephone: DONCASTER 53293

REMEMBER CHAMBERLAID INITIALLY











HOWARD 4994
for all
PLANT HIRE

CHAMBERLAIN PLANT LTD.

(One of the Chamberlain Group of Companies)

CROWN WORKS, SOUTHBURY ROAD, ENFIELD, MIDDX, Tel: HOWard 4994

Y

Strength-in a Big way!

Here is rugged strength to overcome the roughest, toughest conditions . . . tread patterns scientifically designed for every sort of operation . . . built-in dependability to keep your machines always on the job. You can rely on the DUNLOP Earthmover range of tyres to give you the utmost in long, trouble-free service.



TYRES



-built better to last longer!

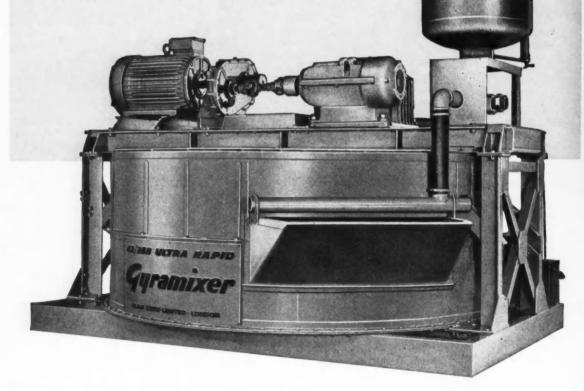
Glutton, Digestion Excellent

Feed it any type of mix; harsh lean concrete, high quality mixes for pre-stressed work, everything in between. The new Gyramixer will mix it thoroughly—so thoroughly, so uniformly, that even the most exacting pre-stressed requirements can be met.

And the Gyramixer works fast... an entire batch mixed in 20-30 seconds... even sticky mixes discharged in under 20 seconds... up to 60 cubic yards an hour. This output is maintained whatever the specification.

You will find full details of how it does this (and a great deal more besides) in the fully illustrated brochure.

We'll be happy to send you one on request.



BLAW KNOX

Design... thinks ahead—stays ahead

The Michigan overcame prejudice against Rubber Tyred Equipment"



What Michigan's mean to Industry

LEACH PLANT HIRE, CASTLEFORD

Mr. Felix Leach and his brother Lt./Col. Charles Leach, TD. operate the well-known Leach (Plant Hire) Company in Castleford, Yorks. Centred in one of the largest industrial areas of the West Riding they maintain a comprehensive fleet of Construction Equipment and Haulage Vehicles. To be competitive in hire rate and service to the customer, it was essential for them to hold plant capable of working under all conditions - so they tried a Michigan.

The trials were extremely successful and a Michigan 55A Tractor Shovel with both light and heavy duty buckets was purchased. It was delivered on Friday, 28th April, commenced work on Saturday and "has never stopped since". When customers called for a Tractor Shovel, a MICHIGAN was sent-found to match up to all demands and overcame the prejudice against rubber tyred equipment by its mobility, rugged strength and power, high production and low operating costs.

Several MICHIGAN'S have now been ordered for this expanding Plant Hire Company proving again that where customer service is to be maintained - a MICHIGAN is the answer.



THERE'S A MACHINE TO SUIT YOUR NEED IN THIS BROCHURE

It contains details and specifications of the complete Michigan range of Tractor Dozers, Shovels and special Attachments, also full description of the unique Michigan Transmission System that makes Michigan's the most sought after machines of their type in the world. COMPLETE THE COUPON AND POST TODAY!

MICHIGAN

MICHIGAN (GREAT BRITAIN) LTD.

Sales & Service: Yorktown Works, P.O. Box 3, Camberley, Surrey. Telephone: Camberley 3421/40

Distributors in Scotland and the four Northern Counties: Scottish Land Development Corporation. Scotlish Depot: 72, Dykehead Street, Queenslie, Glasgow, E.3. Telephone: Shettleston 3546

Northern Counties Depot: Portobello Road, Birtley, Newcastle. Telephone: Birtley 432

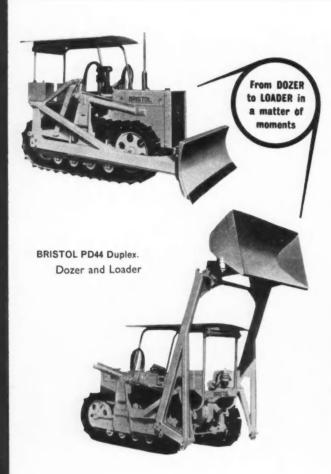
Please send me a comailing list. (CI/IS8)	y of "The	Michigan	Range"	and	add	my	name	to	yo	u
---	-----------	----------	--------	-----	-----	----	------	----	----	---

(Block Capitals Please)

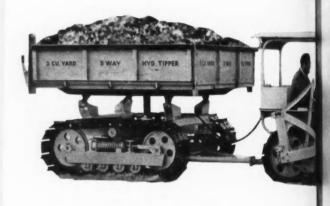




'SKATE' Road Transporter Gear.







BRISTOL Soft Land Trailer.



BRISTOL PD48 Europa.

BRISTOL DIESEL CRAWLER TRACTORS

Cheapest to buy . . . Cheapest to operate Cheapest to maintain

H. A. SAUNDERS LIMITED

INDUSTRIAL TRACTOR DIVISION

836-842 HIGH ROAD, NORTH FINCHLEY, LONDON N.12

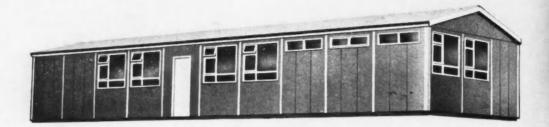
TEL: HILLSIDE 8822:15 LINES: Grams: Dutrax, London N.12

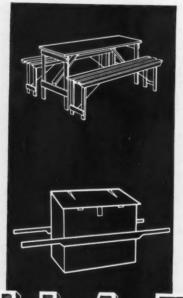


Gear.

E

BRISTOL DIESEL CRAWLER TRACTORS
The world's most versatile earthmovers!







HARDUNS



HARDUN & SONSLTD

HORTON ROAD, WEST DRAYTON, MIDDX.

Tel: West Drayton 3088-9 3761-2

GREATICAL SERVICES SERVICES

RING GREENHAM PLANT HIRE NOW!

LONDON: ISLEWORTH 1141 . TOTTENHAM 6803

SIRMINGHAM: ALDRIDGE 53344

MANCHESTER: ATHERTON 1114 ASHTON-UNDER-LYNE 4312

LIVERPOOL: CENTRAL 3428

SCOTLAND: AIRDRIE 4141







GREENHAM

GREENHAM (PLANT HIRE) LTD. LONDON · BIRMINGHAM · MANCHESTER · LIVERPOOL ASHTON-UNDER-LYNE · AIRDRIE, SCOTLAND GREENHAM EQUIPMENTS LTD. (PLANT SALES), LONDON VIKING 3651

GREENHAM TOOL CO. LTD. LONDON ISL 4422 - BIRMINGHAM AIGHING \$2881

GREENHAM SAND & BALLAST CO. LTD. LONDON FEL 228
GREENHAM TYPE CO. LTD. LONDON ISL 721

GREENHAM (EAST AFRICA) LTD. P.O. Box 3363 Nairobi, Kenya, S.E.A GREENHAM READY MIXED CONCRETE LTD. LONDON RENOWN 8502

LEADING CONTRACTORS ORDER A.E.C. DUMPTRUKS

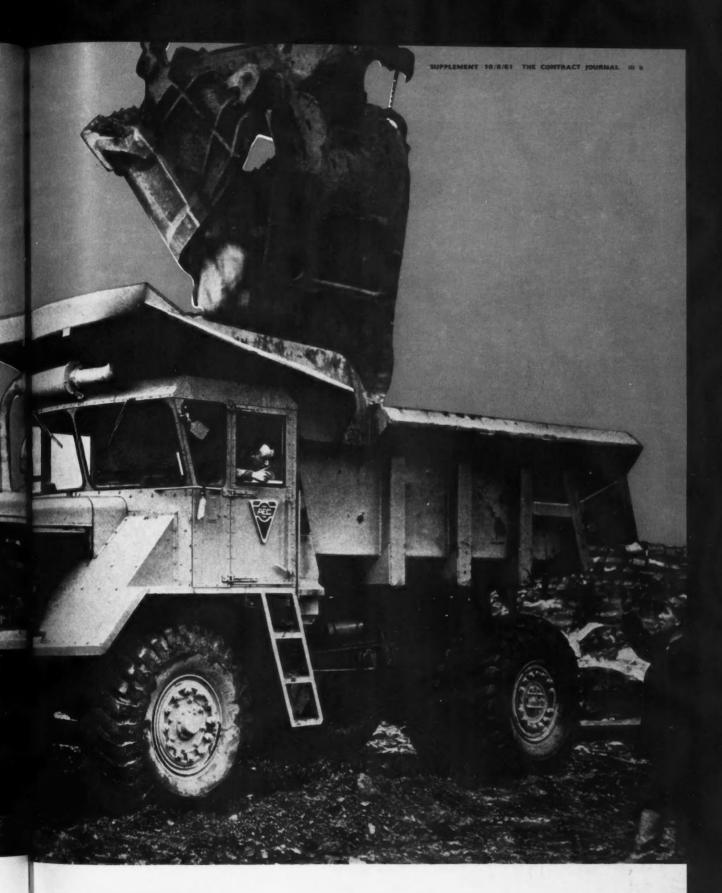
Again and again and again!

COSTAIN... repeat order for nine 18 cubic yard "Dumptruks", bringing their total fleet up to thirty. R. A. DAVIES... repeat order for three 18 cubic yarders and twenty-four 10 cubic yarders, bringing the total fleet up to thirty-one. DEREK CROUCH... repeat order for twelve "Dumptruks" with 19½ cu. yd. coal carrier bodies. Here are just a few examples of the industry's faith in A.E.C. engineering—and of SCOTTISH LAND DEVELOPMENT CORPORATION'S wide experience in off-the-highway haulage.



Designed, powered and built by:

A.E.C. LIMITED SOUTHALL · MIDDLESEX





Full details from Sole Concessionaires: SCOTTISH LAND DEVELOPMENT CORPORATION

BENFORD irst again The

he extra for supplying Silo of 30 tons capa ity is £65.

Cement from a Silo mounted over an 18/12 Reversing Drum Mixer is automatically weighed and injected direct into the Mixer drum instead of into the elevating hopper with the aggregates.

This combined Silo-over-a-Mixer produces ½ cu. yd. of weigh batched compacted concrete about every 2 minutes with a labour force of two only, a Mixer driver and a scraper shovel operator.

It also takes up less ground space. The aggregate elevating hopper stays clean, empties quicker and has a longer life. The overall mixing cycle is faster and more batches are produced in a given time.

A clock face shows the weight of cement used for each batch and an optional device provides a progressive written record of this information.

DIRECT INJECTION

of weighed Cement from silo overhead into Mixer Drum.

WEIGHED **AGGREGATES**

only in loading hopper. No Cement!

BENFORD LTD : WARWICK :

Phone: WARWICK 1170

61

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

NOTICE.—Orders for advertising are accepted en the understanding that the Editor may make any siterations in an advertisement to ensure its conformity with the style and standards of "The Contract Journal." The Proprietors reserve the right to contract the proprietors reserve the right to the standards of "The Proprietors reserve the right to the standard standards of the proprietors stating any reason. No undertaking is given the proprietors will be published on any sectined date. Communications which are not actual registers to the advertisement will not be forwarded. The Proprietors reserve the right to open communications and to withhold these not in accordance with this rule.

and to withhold those not in accordance with this rule.

P O R S A L E.

90 tons Re-layable 95ib. per yd. BULLHEAD RAIL.

50 tons Re-layable 85ib. per yd. BULLHEAD RAIL.

50 tons Re-layable 52 CHAIRS.

60 tons Re-layable 75ib. per yd. FLAT BOTTOM RAIL.

60 tons Re-layable 7310. per yd. FLAT BOTTOM RAIL.
Re-layable 4tt. 81-sin. gauge 75lb. per yd. FLAT BOTTOM TURNOUTS.
Re-layable 2tt. 6in. gauge 30lb. per yd. FLAT BOTTOM TURNOUTS.
Re-layable and Roadway PLAIN SLEEPERS.
Subject to remaining unsold.
All inquiries for these and other materials welcomed.
EAGRE CONSTRUCTION CO., LTD., East Common Lane, Scunthorpe, Lincs. Telephone: Scunthorpe 4513/7.

C. EVANS AND SONS, LTD., offer for SALE:
SLEEPERS, for roadways, re-laying, silage:
CROSSING TIMBERS.
Contact: Burnside Street, Bow, London, E.3.
Telephone: ADVance 5691 (3 lines).

Contact: Burnside Street, Bow, London, E.S. Telephone: ADVance 5991 (3 lines).

WANTED, STEEL and ALLOY SCAFFOLDING, Cash an immediate collection.—M. SANDERS, LTD., 18/20 Mediar Street, London, S.E.S. ROD 5143.

CROSSING TIMBERS, from 9ft. to 15ft., size 12in. x 6in. and 14in. x 7in., at £10 per ton delivered site.—THOS. LORD, LTD., Mitelia Street, Burnley Telephone: Burnley 3365.

NEW Unused Stock Rusty Linkepipe, 4in., 6in., 8in. and 10in. dia. Random lengths. £30 per ton ex site.—BUTLER TRADING (SOUTHSEA), LTD., 80 Marmion Road, Portsmouth. Phones 25244/5.

WANTED, BRICK and CONCRETE HARDEOGRE, any quantity.—R. BARKER (PECKHAM), LTD., New Cross 3337.

WHY HIRE WHEN YOU CAN BUY CHEAPER!!

New and S/H Scaffolding, Mixers, Boards, on DEFERRED TERMS all types of Plant.
Repayments over 12, 18, 24 months.

THE HILL GROUP
48/79 PENGE ROAD · LONDON, S.E.25
Telephone: SYDenham 3131/5.

TARPAULINS

NEW, GREEN ROTPROOFED, SEAMS DOUBLE-SEWN WITH BEST LINEN THREAD; REINFORCED BRASS EYELETS; SPLICED ROPES

	(16oz.)	(18oz.)	(15oz.)
Size approx.	JUTE	FLAX C	OT. DUCK
12ft. x 9ft.	£3 8 €	£4 9 6	£4 19 0
15ft. x 9ft	£4 66	£5 12 0	£6 39
15ft. x 12ft	£5 14 6	£7 96	£8 50
18ft. x 12ft	£6 17 6	£8 18 9	£9 18 0
18ft. x 15ft	£8 12 6	£11 50	£12 76
20ft. x 15ft	£9 14 6	£12 11 6	£13 15 0
24ft. x 18ft	£14 00	£17 18 6	£19 16 0
30ft. x 21ft	£19 18 6	£25 17 6	£28 17 6
EX-GOV	ERNMENT.	RECONDITIO	NED
10ft. x 7ft	£1 15 0	18ft. x 12ft	£5 15 0
10ft. x 10ft	. £2 10 0	18ft. x 15ft	
14ft. x 10ft	£3 10 0	20th v 15th	67 10 0

15ft. x 12ft. ... £4 15 0 20ft. x 18ft. ... £9 0 0 20ft. x 10ft. ... £5 10 0 24ft. x 18ft. ... £11 0 0 SPECIAL BARGAIN OFFER NEW (EX-GOVERNMENT) LIMITED QUANTITY 301t. x 201t. . £20 16 6 30ft. x 30ft. . £29 17 6 EX-RAILWAY TARPAULINS IN STOCK.

All sheets are eyeletted and roped immediate delivery. — Carriage paid. Money refunded if not satisfied.

MORELAND TRADING CO. LTD. (CJ) 25 St. Pancras Way, London, N.W.1. Telephone: EUSton 5210 and 2383

PODMORE LADDERS

WOOD OR ALUMINIUM Quality Ladders for all needs.

Extension 2-piece and 3-piece,
all sizes up to 60 ft. extended.
Pole liadders, Trestles, Steps.

KEEN PRICES, QUICK DESPATCH

PODMORE WORKS Ltd 769-773 GARRATT LANE, LONDON, S.W.I7.

Phone:— WIMBLEDON 7622

CLASSIFIED ADVERTISEMENT RATES:

PLANT AND MISCELLANEOUS

Four lines or less 14/-, and 3/- for every additional line. Box number 1/- extra.

Display £2 10s. per single column inch.

POR SALE.

OR SA

INCH SHEE.

Inches eft. to 16to.

Inches eft

Telephone: BATteraea 3413.

WANTED, unlimited quantities et:
SCAFFOLD TUBE (Steel and Alloy).
SCAFFOLD FITTINGS (all makes).
Prompt inspection at your convenience.
Contact: C. EVANS AND SONS, LTD.
Burnside Street, Bow, London, E.J.
Telephone: ADVance 5691 (3 lines).

GARAGE DOORS made to your individual requirements. Also CASEMENT WINDOWS, FRONT GATES, etc. Delivery anywhere.—Send for illustrated olinery list: UNIVERSAL SUPPLIES (SELVEDRE), LTD., Crabtree Manorway, Belvedre, Kent. Tel.: Erith 32945.

STEEL SECTIONS and PLATE, etc. Cut to your specification. New and second-hand material available.—TEMPLE MILLS (STEEL), LTD., Temple Mills Lane, Stratford, E.15. Maryland 2660/7734.

CORRUGATED STEEL SHEETING PURCHASED as Cerected or any type of BUILDINGS or HANGARS. Prompt stripping any area.—I. DUFFY, Bank Street, Clayton, Manchester, 11. Telephone: East 3361.

GRANITE SETTS

DELIVERED ANYWHERE

HARRIS & BAILEY LTD. CROYDON

ADDiscombe 3181 Ref: Mr. T. A. Junes

SPECIAL OFFER OF LARGE SIZE TUBE

l0in. Tube in lengths up to 40ft. 12in. Tube in lengths up to 40ft. 14in. Tube in lengths up to 20ft. 15in. Tube in lengths up to 20ft. 16in. Tube in lengths up to 40ft. 18in. Tube in lengths up to 25ft. 20in. Tube in lengths up to 25ft.

All of these sizes can be supplied plain ends or flanged. Also in stock a quantity of 24in. Tube, flanged in lengths of approximately 24ft.

Large stocks of smaller size Tube always available

MIDLAND IRON & HARDWEAR CO. (Cradley Heath), LTD. CRADLEY HEATH, STAFFS

Telegrams : pipes, Cradley Heath

Telephone: Cradley Heath 66364-5-6

SCAFFOLDING & PLANT

From stock, reconditioned and new. We can offer a continual supply and service of: SCAFFOLD TUBE (Steel and Alloy) **PUTLOGS (Steel and Alloy)** FITTINGS . "H" FRAMES BOARDS . PROPS . STRUTS TRESTLES AND SPLITHEADS FLOOR CENTRES COLUMN AND BEAM CLAMPS ROAD FORMS

> For detailed list of above and all other items of stock contact:

C. EVANS & SONS LIMITED BURNSIDE WHARF, BURNSIDE STREET, BOW, LONDON, E.3 Telephone: ADVance 5691 (3 lines)

3

W. A. SKINNER & CO. LTD.

LONG DITTON, SURREY

SUPPLIED AND ERECTED IN ANY DISTRICT

CAST - IRON SPIGOT and SOCKET PIPING, mostly new, standard lengths, immediate delivery, 16in. bore, 100ft 19in. bore, 200ft. (Screwed Gland). 15in. bore, 100ft. 8in. bore, 500ft. (Screwed Gland). 10in. bore, 100ft. 10in. bore, 200ft. 11 x 12ft. lengths. Stanton. 8in. bore, 200ft. in 6/9ft. lengths. 5in. bore, 500ft. chiefly 9ft. 10in. 10in

EVANS AND SONS, LTD., have in stock: 200 tons PIERCED STEEL PLANKING. tons R.S.J.s., ANGLES, PLATES, etc. tons NEW and S/H CORRUGATED SHEETS. Rolls SOMMERFELD TRACK.
Contact: Burnside Street, Bow, London, E.3. Telephone: ADVance 5681 (3 lines).

Telephone: ADVance 5691 (3 lines).

SCAFFOLDING. — Urgently WANTED. Steel and Alloy SCAFFOLD TUBE and all types of SCAFFOLD COUPLERS. Inquiries for Non-mechanical Builders' Plant welcomed.—Contact: SCAFFOLDING SERVICES, 69 Upton Lane, Forest Gate, London, E.7. Tel.: Gra. 2002.

Tel.: Gra. 2002.

CORRUGATED SHEETS WANTED. Any quantities.
Top prices paid for ANDERSON SHEETS and
AMMUNITION SHEETS.

Contact: C. EVANS AND SONS, LTD.,
Burnside Street, Bow. London, E.3.
Telephone: ADVance 5691 (3 lines).

JERRICANS. good condition, used once for distilled water, 2/3 each delivered up to 200 miles for lots of 1.000 and over. Lots of 100 at 2/9 each. W. W. LEESE (ALIFAX), LTD., Leeds Road, HalifaX, Telephone 68 (HALIFAX), LTD., Leeds Road, HalifaX.

STEEL BUILDING, 150ft. long x 95ft. (clear span) wide x 17ft. eaves. Covered Asbestos Sheets. All as new. For quick SALE on site (Cheshire). £2.350. — MOLE AND BRAY, LTD., Stourport-on-Severn.

FOR SALE, 50 second-hand SECTIONAL TIMBER BUILDINGS, about 60ft. x 16ft. Excellent condition. Ideal site offices, £75 each. —Apply: D. BRANT, Tadley, Basingstoke, Tel.: Heath End 382.

TARPAULIN HIRE

JOHN MACNAMARA 4 CO. BUSH ROAD, LONDON, S.E.S BERMONIDSEY 3275 & 1435



16ft., 24ft. and 30ft. span, any length



large TIMBER BUILDINGS ex stock

NAYLORS (BILSTON) LTD. 204 Wolverhampton St., Bilston, Staffs. 'Phone: Bilston 41689, 42448



STAGING

Large stocks always available

W. C. YOUNGMAN LIMITED,

Contractors' Plant Division, Wandsworth Road, London, S.W.8. Telephone MACaulay 2233.

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

R AILWAY SLEEPERS, sound second-hand, cart road quality: 1-49 at 12/3 each; 50-99 at 11/9 each; 100 and over, 11/3 each.
TARPAULINS, second-hand, overhauled, with ropes and eyelets, 161t. x 121t., £6 each; 181t. x 15ft., £6 13s.
Immediate delivery from stock.
A. F. SIMPSON, LTD.,
68/70 Penge Rd., London, S.E.25, SYDenham 3131/5.

SUPPLEMENT

enham 3131/5. NEW CORRUGATED SHEETS.—800 sheets 8ft. x 8/3in. x 22-gauge galvanised primes; 900 sheets 6ft. x 8/3in. x 26-gauge galvanised primes. Also quantities of other sizes in stock.—For further details, contact: C. EVANS AND SONS, LTD., Burnside Street. Bow, London, E.3. Tel.: ADVance 5691-3.

you are erecting a building for cladding, con-structing a GANTRY or Heavy Duty RACKING, of for details of SYDUN Prefabricated Steel Units

n: PLANT AND BUILDING EQUIPMENT, LTD., 1 Chatfield Road, London, S.W.11, Telephone: BATtersea 9213.

BUILDERS' IRONWORK, BALUSTRADES, BALCONY RAILS, INTERIOR / EXTERIOR STAIRWAYS, LADDERS, etc., to Specifications. Ornamental Gate Catalogue available.—HALLS, Metalworkers, Old Hill, Staffs. Cradley Metal 69538.

S LEEPERS suitable for temporary roads.
CROSSING TIMBERS from 9ft. to 15ft., size
12in. x 6in. and 14in. x 7in.—KENNETH SHEPLEY,
73 Boodle Street, Ashton-under-Lyne, Lancs. Tel.:
AShton 3338.

EVANS OF BOW are still the BEST BUYERS of all your surplus R.S.J.S. ANGLES, CHANNELS, etc. Contact: C. EVANS AND SONS, LTD. Burnside Street, Bow, London, E.S. Telephone: ADVance 5691 (3 lines).

Telephone: ADVance 5691 (3 lines).

TARPAULINS for SALE and HIRE.
EDWARD ASH, LTD.,
Kent Wharf, Creekside, Depotrord, S.E.B.,
Telephone: Tideway 2651/2.

SLATE DAMPCOURSE, Welsh, in loads 8/14 tons,
delivered. Prices on application. — JOSEPH
NANSON (SLATES), LTD., Stockton Heath, near
Warrington.

CONTRACTORS' AND BUILDERS'

BUSH ROAD, LONDON, S.E.8.
BERMONDSEY 3275 & 1435

FABRICATED STEELWORK. TUBULAR BARRIERS, ETC.

KEENEST PRICES

Send details of your requirements to

PEERLESS FENCE & PRODUCTS LTD. HAREFIELD, MIDDX.

NEW TARPAULINS

Approx. sizes, fitted with reinforced eyelets and spliced-in ropes. GREEN WAXPROOFED JUTE 160z. sq. yd. before proofing

GREEN WAXPROOFED JUTE
1602. Sq. yd. before proofing
12ft. x 9ft. - £3 6 0 18ft. x 12ft. - £6 12 0
15ft. x 9ft. - £4 2 6 18ft. x 15ft. - £8 12 0
15ft. x 12ft. - £5 100 21ft. x 15ft. - £9 12 6

GREEN PROOFED COTTON
1202. Sq. yd. before proofing
12ft. x 9ft. - £4 10 0 18ft. x 12ft. - £9 0 0
15ft. x 9ft. - £4 10 0 18ft. x 12ft. - £9 10 0
15ft. x 12ft. - £7 10 0 21ft. x 15ft. - £12 13 9
GREEN PROOFED COTTON
1502. Sq. yd. before proofing
12ft. x 9ft. - £4 19 0 18ft. x 12ft. - £9 10 0
15ft. x 9ft. - £4 19 0 18ft. x 12ft. - £9 10 0
15ft. x 9ft. - £6 3 9 18ft. x 15ft. - £11 17 6
15ft. x 12ft. & £8 5 0 21ft. x 15ft. - £13 17 0
GREEN PROOFED FLAX

GREEN PROOFED FLAX
180x. sq. vd. before proofing
12ft. x 9ft. - £4 100 18ft. x 12ft. - £9 0 0
15ft. x 9ft. - £5 12 6 18ft. x 15ft. - £10 17 6
15ft. x 12ft. - £7 100 21ft. x 15ft. - £12 13 9

EX-RAILWAY TARPAULINS fully reconditioned

eyelets and ropes and redressed both sides. 14' x 10' £4.10.0 20' z 14' £8.10.0 Ex Stock. - Carriage paid England and Wales.

POTTER BROS. (Tarpaulins) LTD.

(Dept. C)) SHREWSBURY. 'Phone 2256, Est. 1855

SCAFFOLDING, etc., FOR SALE from STOCK:
EXCELLENT CONDITION; SCAFFOLD FITTINGS
—FULLY RECONDITIONED, or serviced, or selected
second-hand condition—all makes available. Putlog JULY LEGION DONNING. SCAFFOR FIRST

Telephone: 82171.

WANTED: CORRUGATED STEEL SHEETS.
Second-hand. Any area. Sites cleared. Prompt payment.—J. DUFFY, Bank Street, Clayton, Manchester, 11. Telephone: East 3361.

TRUSCOTT FENCING, LTD., DORKING, SURREY. Telephone 3416.
All classes of FENCING supplied and erected. Specialists in Chain Link. Estimates free.

IEW ROADFORM PINS for SALE, 5,000 2tt. x 'sin. dia. at 2s. 6d. each; 6,000 2tt. x 'sin. dia. at 2s. each.—TEMPLE MILLS (STEEL), LTD., Temple Mills Lane, Stratford, E.15. Maryland 2660/7734.

BY Deans Lane, Edgware, Middlesex, Telephone:
MILL Hill 4644 (or 1855) and NORth 4112.

NISSEN-TYPE HUTS for SALE. Prompt dispatch of 161t., 241t. and 301t. wide Huts, also Romey HUTS, 31st. wide, and BLISTER HANGARS, 861t. 6in. and 91ft. wide. These buildings are in various lengths and comprise steel framework with galvanised corrupated steel sheeting.—Full details from Dept. (128), 1 THORN AND SONS, LTD., Brampton Road, Edgewheath, Kent. Telephone: Bexleyheath 0021.

A CROW LONG FORMS.—Large quantities available, and WALL FORMS.—For further details, contact: C. EVANS AND SONS, LTD., Burnst, Edgewick, Bow. London, E.3. Tel.: ADVance 5691-3.

DERBYSHIPE LIMESTONE, all grades, dry or tarred, up to 200 tons per day, or graded steel stee

F OR SALE.

NISSEN HUTS. — 36it. x 16it. from £60:
36it. x 24it. from £70: 36it. x 26it., from £90.

ROM Hon £50. FEEL BUILDINGS. —96it. x 33it., from £50.

BLISTER HANGARS. — 91it. x 84it., £900. mes galvanised sheets, with ends; 91it. x 45it., £200. frame only: 84it. x 45it., £450. asbestos-clad. frame only: 84it. x 45it., £450. asbestos-clad. frame only: 84it. x 45it., £450. disbestos-clad. timber floor, £300: 100it. x 18it. 6in., with timber floor, £300: 100it. x 18it. 6in., with timber floor, £300: 84it. x 20rt., dismantled, £250. F. JAMES AND SONS, Newport Pagnell 18 and 18.

BALLOON FABRIC SHEETS.—Original Ex Government balloon. Waterproof, hard-wearing, roped and eyeletted. Useful as lightweight tarvaulin, draught screens, painters' suspension sheets, floor sheets. Each Sheet glarareted. 12is. x 9it., 48is., 140s.; 23it. x 18in., 180s.; carriage paid. Write ample. L. H. HILL, LTD., 118 North Street, Hornchurch. Phone: Hornchurch 46561 PBX.

WANTED. PROPS.—STRUTS.—BEAM CLAMPS. Offer your surplus non-mechanical plant to us. We will collect. Evex NS AND SONS, LTD.

EVANS AND SONS, LTD.

Telephone: ADVance 5591 (3 lines).

Telephone: ADVance 5691 (3 lines).

SECOND-HAND SECTIONAL TIMBER BUILDINGS

24(1, 8, 12)... £102; 30H. x 15H... £138; 40H. x

Belt. y 121... £102; 30H. x 15H... £138; 40H. x

Delivery included. 10 mills and the second s

norway, Belvedere, Kent. Tel.: Erith 32948.
EVANS AND SONS, LTD., offer for SALE/HIRE
RECONDITIONED ROADFORMS: 600 6in. 8in.
12in. Standard: 1,500 512in., 6in., 8in. and 12in.
vy Duty. Complete with new pins. FirstContact: Burnsled Street. Bow, London, E.S.
Teleshone: AbVance 5691 (3 lines).

WANTED. Braithwaite SECTIONAL TANKS or LOOSE PLATES, 4ft. square, helm. to coletord, Glos.

FOR SALE, BLISTER HANGAR.—B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon.

SITE HUTS

Ex stock at the right price MIDDLESEX PREFABRICATED BUILDINGS LTD GREEN LANE . HOUNSLOW . MIDDLESEX

HOU. 7281-7

SALE FOR

Unused 11 bore Steel Scaffolding, 12' lengths 13/- each. 6' lengths 6/6d. each. Scaffolding Clips 1/-.

L. W. VASS LIMITED

AMPTHILL · BEDFORD
Telephone : AMPshill 3255/6

Strate Supplied to the Liver Hope of the Supplied to the Suppl COOPIG

PAINT TRANSFERS PERMANENT · FADELESS · EASY FIXING

CONTRACTORS' PLANT · TRANSPORT VEHICLES

VERNON PLACE, LONDON, W.C.I Phone: HOLBORN 4695 GAYSYNS, WESTCENT, LONDON



steel-framed, prefabricated BUILDINGS

FACTORY BUILDINGS, WORKSHOPS, PLANT STORES, ETC., ETC.

- No on-site riveting or welding Speedy erection Permanent ar temporary High recovery value

30ft. to 100ft. clear span; lengths in any multiple of 12ft. 6in. Write for leaflet K.104

THE LILLESHALL COMPANY LTD.
ST. GEORGES · OAKENGATES · SALOP
Oakengates 120

REINFORCEMENT

ALL DIAMETERS

A COMPLETE REINFORCEMENT SERVICE **DESIGN · SUPPLY · CUT** BEND · LABEL DELIVER AND FIX

Let us have your specification for all or any part of these services and we will quote you our competitive prices delivered works or site.

Telegraphic address: Steelwarf, Barking, Telex. Telex: 21194





(STEEL STOCKHOLDERS) LTD. STEEL WHARF, RIVER RD., BARKING, ESSEX Telephone: RIPpleway 5751-4

1

£60: £90.

MPS.

NGS Ift. 1 Intra-new btree

to TD.

ANT Oxon.

LTU

SEX

nts

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

EVANS AND SONS, LTD., offer for SALE:

RECONDITIONED SCAFFOLD TUBE (Steel and top). Also over 250,000 FITTINGS in stock, luding S.G.B., Mills, Norstel, Burton, Big Ben, allon, etc. For full detailed list and expert advice. Contact: Burnside Street, Bow, London, E.S. Telephone: ADVance 5691 (3 lines).

Telephone: ADVance 5691 (3 lines).

SECOND-HAND TIMBER in all sizes always available from stock, e.g., Pitch Pine Baulks from 12in, x din. to 14in, x 12in, and Deals 7in, x 21gin, 7in, x 3in, 9in, x 3in, 9in, x 4in, suitable for shoring, etc. KENNETH SHEPLEY, 73 Boodle Street, Ashton-underlyne 3338, Lancs.

KENNET CHARGE THE CONTROL OF THE CON

SLEEPERS for access roads and all purposes TIMBERS for shoring, paling and walling. Consults us first.—TRACK SUPPLIES AND SERVICES, LTD. Haversham Bank Sidings, Wolverton, Bucks. Tel. Wolverton 2242.

C. EVANS AND SONS. LTD., offer for SALE/HIRE ACROW PROPS—STRUTS—FLOOR CENTRES Large quantities in stock. First-class reconditioned order. For information and list, contact: Burnside Street, Bow, London, E.J. Telephone: ADVance 5691 (3 lines).

PODMORE SITE HUTS



PODMORE WORKS Ltd., 769-773 GARRATT LANE, LONDON, S.W.17

PILE DRIVING . DIVING

Piling Work carried out affoat and on shore in London and Home Counties. Crane Barges and Heavy Lifting Equipment for hire.

Diving carried out with expert divers using modern equipment

Underwater Cutting and Welding Work a speciality.

PILING AND PLANT HIRE CO. (KENT) LTD.

Abbeydale Road, Wembley, Middlesex Perivale 4471/73

NEW TARPAULINS

EXACT SIZES ONLY

EXACT SIZES ONLY

UTE, 150z. before arean wax proofing: 12ft. x

9tt. each 82/5, 15ft. x 12ft each 132/6, 16ft. x 12ft. each 132/6, 16ft. x 12ft. each 132/6, 21ft. x 15ft. each 204/6.

LAX, 150z. before green chemical proofing: 12ft. x 9ft. each 97/-, 15ft. x 12ft. each 149/6, 18ft. x 12ft. each 168/6, 21ft. x 12ft. each 12ft. a 2ft. each 12ft. x 15ft. x 12ft. each 164/3, 15ft. x 12ft. each 164/3, 15ft. x 12ft. x 15ft. each 164/3, 15ft. x 15ft. each 164/3, 15ft. x 15ft. each 12ft. each 185/6, 8fAND NEW SHEETS, carriage paid England and Wales. Fitted iong ropes, brass eyelets and strengthening patches.

ANY QUANTITY FROM JONDON STOCK

ANY QUANTITY FROM LONDON STOCK

JOHN MACNAMARA & CO. LTD.
BUSH ROAD, DEPTFORD, LONDON, S.E.B. BER. 3275-1435

SKIPS (Circular Tipping and Rollover Concrete Pouring), TRESTLES, SPLITHEADS, TRENCH SHEETING, STRUTS, COLUMN CLAMPS, FLOOR CENTRES, ROAD FORMS, PROPS, SCAFFOLDING and FITTINGS, ets. For SALE and HIRE. PLANT AND BUILDING EQUIPMENT, LTD., 1 Chatheld Road, London, S.W.11, Telephone: BATtersea 9213.

1 Chatheld Road, London, S.W.11.
Telephone: BATtersa 9213.

RAILWAY MATERIALS.—Let us cuote delivered to your site, Light and Heavy Rail. Track, Sleepers, Crossing Timbers Dog Sniker Rail. Track, Steepers, Crossing Timbers Dog Sniker Rail Timber Rail Timbers Dog Sniker Rail Timbers Dog Sniker Rail Timbers Do

BAILEY BRIDGE PANELS for SALE.
ROADS AND RUNWAYS. Tel.: Abbey 4905.

500 tons STEEL

Sound S/H R.S.J. and ANGLES, etc. New stock rusty M.S.R.

immediate delivery from stock
A. F. SIMPSON, LTD.,
68/70 Penge Road, London, S.E.25.
Telephone: SYDenham 3131/5

ROAD FORMS ALL TYPES PROPS Numbers 1, 2, 3, 4 Trench Struts Nos. 1, 2, 3 Column Clamps **Trench Sheeting**

RAPID METAL DEVELOPMENTS LTD.

VEL OPMEN S

Birmingham — Birchfields 60213

London — Tideway 2625

Glasgow — Bridgeton 4214

Stockton-on-Tees — 64150

Liverpool — Simonswood 2482

Norwich 46594 — Bristol 648306

Swansea 50464 — Exerte 63595

Belfast 24591 — Dublin 54456

FOR SALE.

FOR SALE.

36ft. x 16ft. From £60.

36ft. x 24ft. From £70.

36ft. x 30ft. From £90.

ROMHEY ALL-STEEL BUILDINGS:

96ft. x 35ft. From £35.

91ft. x 84ft. £100. New Galvanised Sheets, with ends.

91ft. x 45ft. £200. Frame only.

84ft. x 45ft. £450. Asbestos clad.

TIMBER BUILDINGS, AS STANDING:

100ft. x 28ft., with Timber Floor, £400.

60ft. x 28ft., with Timber Floor, £300.

100ft. x 18ft. 6in., with Timber Floor, £300.

84ft. x 20ft. dismarted, £250.

5. JAMES AND SONS, LED., offer for \$ALE:

F. JAMES AND SONS, Newport Pagnell 18 and 19.

EVANS AND SONS, Newport Pagnell 18 and 19.

EVANS AND SONS, LTD., offer for SALE:
o.d., 11-in. I.d., 8-gauge. Any quantity—immediate
deliver. The second of the secon CROMWELL CO., Newport, Mon. 59045.

CROMWELL CO., Newport, Mon. 39045.

HANGARS, 76ft. long, 62ft. wide, 18ft. high to eaves, large sliding doors, covered with galvanised sheets.—H. POINTON, Edge Hill Farm, Mossley, Congleton, Cheshire. Tel.: Congleton 3574.

HANGAR 240ft. x 110ft., clad with Trafford type asbestos, fully lined and fitted with lights and heating. Can be inspected standing. Price £3,500.

MITCHAM AND SONS, Burweil (226), Camba.



TANKS OF ALL TYPES

Rectangular, Cylindrical, Horizontal, Vertical, Steel and Aluminium. Capacities 150/12,000 gallons. Price £5 and upwards. Painted or otherwise. Quotation given delivered your site. Special service on 30ft. x 9ft. Storage Vessels.

Contact: COX AND DANKS, LTD., Wadsley Bridge, Sheffield, 6. Telephone 344391.

EDWARD ASH, LTD.

RAILWAY SLEEPERS

AND

CROSSING TIMBERS

KENT WHARF, GREEKSIDE, DEPTFORD, S.E.S Telephone: Tilboway 1841-2

ELECTRICAL, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

WELDING SET, 300-Amps, Siddeley Air-cooled Diesel, 2-wheeled pneumatic-tyred trailer-mounted. Sargain £295.—Write: 26 Metville Grove, Newcastle upon Tyne.

FOR SALE, Two Rooks ELECTRIC MOTORS, 45-h.p., 2-phase, 200-V: also One 1yd. CRANE GRAB. All offers considered.—Phone: Renown 2283-4.

WANTED, 20/24-ton capacity LOW-LOADER, trailer only.—MADOC JONES (MACHINERY), LTD., Denbigh. Tel. 201.

WE BUY REPLACEMENT PARTS for Caterpillar Tractors.—Send offers to Box Q.Q.386, "The Contract Journal."

ALL TYPES SUPPLIED FIRST CLASS ERECTION SERVICE Phone: ORPINGTON 26641 (3 Lines) YOUNGS OF ORPINGTON LTD.

211-215 HIGH ST., ORPINGTON, KENT



COACH SPECIALISTS of the SOUTH

always have available a

Large stock of Good Used **PASSENGER VEHICLES**

many with C.O.F.s

Ideal for conveyance of staff Yearly Road Fund Tax £15.10.0

BEDFORD 26 str. Coaches from £75 or suitable for SITE OFFICES, from £50 A.E.C., LEYLAND, etc., 33/35 str. from £100

Let us demonstrate at your premises

E. J. BAKER & CO. (DORKING) LTD.

The Coach Works, Farnham Trading Estate Telephone: 4626/7 Farnham, Surrey.

ELECTRICAL EQUIPMENT, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

SUPPLEMENT

RUSTON POWER TO SERVE YOU.
From stock: SERVICE EXCHANGE ENGINES.
Trees RCN, ROHN, ROHN, ROHN, VEN, YEN, WEN, AND HANDER ENGINES.
YEN, YCEN, and PAXMAN HANGE.
Full range of ENGINES from 10RB to 110RB Excavaters.
SERVICE EXCHANGE ENGINES also stocked for Cranes, Locos., Pumps, Power Packs, etc.
CHANGEOVERS to EXCAVATORS and other PLANT UNDETAKEN on site by STAFF of competent FIELD ENGINEERS.
TILSLEY AND LOVATT, LTD., Engine and Plant Div., Newstead Trading Estate, Trentham, Stoke-on-Trent.
Telegrams: "Diesel," Stoke-on-Trent.
Tolegrams: "Diesel," Stoke-on-Trent.

POR SALE, 1959 Bedford TIPPERS.—A fleet of 10 Model JSs (current type, normal control), with 300 cu. in. Bedford Diesel Englines, fitted Anthony underfloor gears and 6 cu. yd. Always Welding H.D. steel bodies, cab guards, 316 plate floors, fixed and drop sides, 900 x 20 tyre equipment. Average mileage 45,000. Ready for work.—E. J. BAKER AND CO. (BORKING), LTD., 55/61 London Street, Cherisey. Telephone 2391.

FOR SALE Cable Reel JACKS, £5 10s. 12/15-ton Simplex RATCHET JACKS from £12 10s. Alrewas. Staff-ordshire. Telephone: Alrewas 354/5/6.

POR HIRE and SALE, FORKLIFT TRUCKS of every description, including Electric Reach Trucks. Side-lift all tonnage. Powered by Diesel, Electric, L.P. Gas and Petrol.—B.G. PLANT (SALES AGENCY), LTD., Wallington, Oxon. Wallington 44.

WANTED, two Caterpillar D8 CYLINDER HEADS.
CHARLAS DIESEL PLANT CO., LTD., 139
Blenheim Road, North Harrow. Tel.: Harrow 1550.

BALL AND ROLLER BEARINGS FOR ALL CONTRACTORS PLANT

BRITISH . AMERICAN . CONTINENTAL

Any quantity despatched same day. A.C. BEARINGS

245 KNIGHTSBRIDGE S.W.7

KNI 4277 KEN 9602

GUARANTEED USED TRACTOR/ CRAWLER SPARES . 300 TRACTORS ALWAYS IN STOCK FOR DISMANT-LING . EQUIPMENTS . WINCHES TRACKS . ROLLERS . HEADS, ETC. SHELTON TRACTOR SPARES LTD. BULBY, BOURNE, LINCS. Tel.: EDENHAM 223-4

VELDING

SENIOR - HIRE - SERVICE

MUREX - LINCOLN - PETBOW

Double or single operator 30-600 amp diesel or electric Arc cutting for cast pipes & castings Gas cutting equipment Skilled operators if required

K. J. SENIOR & Co. FORDWATER TRADING ESTATE CHERTSEY, SURREY. Tele: Chertsey 2950

RUSTON & PAXMAN SPARES!

Dispatched "same day"s By the Official Stockists:

Wheatley & Whiteley

99 KIRKSTALL ROAD, LEEDS 3

Tel. 31122 Spares only Tel. 20124 NORTH - EAST AREA. — WELDING PLANTS, COMPRESSORS, MOBILE CRANES, FORK LIFTS, GENERATING SETS, TRAXCAVATORS 933, 955, 944, DROTTS, DERRICKS, WINCHES, ROAD ROLLER, 10-ton Diesel, DUMPERS, for HIRE.—REEDS CRANES AND PLANT, LTD., Newcastle upon Tyne. Tel. 33311. J. JOHNSTON AND CO., LTD., for REPAIRS, OVERHAULS and FIELD SERVICE to all types of Contractors Plant, Mobile Cranes, etc.—Phone Elgar 6905. RAPIER SPARES AND SERVICE. Coronation Road, Park Royal, London, N.W.10.

SPECIAL LAND-ROVER models for contractors, including our new mobile site offices and 12-seater personnel carriers at £998.—R. J. SEARLE, LTD., Thames Street, Sunbury. Telephone 3014.

PRISTOL ANGLEDOZERS AND EQUIPMENT.
Immediate SPARES and REPAIR SERVICE for all
models.—H. A. SAUNDERS, LTD., Main Distributors.
The Butts. Worcester. Telephone 26651.

FOR SALE, 300/400-Amp WELDING SETS.
WILLIAM G. SEARCH, LTD., Whitehall Road,
Leeds, 12. Tel. 639081 (10 lines).

FRANK COWLEY

BUSES 200 COACHES

READY FOR YOUR JOB

£425

DELIVERED YOUR WORKS

WE SUPPLY YOU WITH 32. 33. 35 or 56 SEATER

SINGLE or DOUBLE DECK BUS or COACH

EVERY MACHINE FULLY GUARANTEED WITH TEST CERTIFICATE

6 UNUSED 900 x 20 TYRES

TAX PAID FOR 12 MONTHS

NEW OR GUARANTEED BATTERIES

FREE DELIVERY

NO EXTRA CHARGES

CHOICE OF LEYLAND, A.E.C., BRISTOL or GUY, ETC.

WILL TAKE YOUR OLD VEHICLE IN PART EXCHANGE

FRANK COWLEY

3 Blackfriars Road, Salford, 3

one: MANCHESTER BLACKFRIARS 7577 and BLACKFRIARS 1048

TYRES for SALE.—Surplus to export demands.
Part-worn Tyre Bargains. All sizes in stock
Example: 700 × 20, £6: 750 × 20, £7: 900 × 20, £8.
Cash cheeue/P.O. with order. Prices include delivery.
We are receiving regular repeat orders from may
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all over the country. All goods sent
large concerns all goods sent goods and goods sent
large concerns all goods sent goods and goods sent
large concerns all goods sent goods and goods all goods and good

Tel.: Edmonton 7373.

CYLINDER HEADS.— Caterpillar, International Ruston, Diamond T. B.M.C., A.E.C., A.E.C., Caterpillar, International Ruston, Diamond T. B.M.C., A.E.C., Caterpillar, International Ruston, Diamond T. B.M.C., A.E.C., Caterpillar, International Ruston, Diamond T. B.M.C., A.E.C., Caterpillar, Caterpillar, International Ruston, Caterpillar,
PRIESTMAN Mk. IV TRACKS, good, fitted ¹⁵lein, pins, £35.—J. W. MARCHANT, Wicken, Wolverton, Bucks. Telephone: Wicken 200.

ROAD SWEEPER/COLLECTOR, Bedford/Lacre, 1954 ex county council, good condition, £250 G. E. NEVILLE AND SON, LTD., Mansfield 2070,

FOR TRACKS | Learnington Spa Telephone: 8672

V T

OPPORTUNITY KNOCKS

1400 × 20 TYRES

Unused, complete with Tubes and Flaps, on 10-stud Divided Wheels. Listed over £100. Accept £60 each. Also available, Six NEW COVERS, 1000 x 24, 14-ply, at keen price.

C.T.S. TYRE SERVICE, St. Giles Street, Norwich.

LIGHTING SETS & WELDERS

ALL TYPES FROM I kW. to 200 kW. ALL VOLTAGES. PETROL & DIESEL

FOR HIRE

BROADBENT BROS. (NOTTM) LTD. DALESIDE ROAD WORKS

NOTTINGHAM

Phone: 53927





Obviously not OUR Customer!

EXCHANGE ENGINES INSTALLED IN ALL TYPES OF PLANT DURING WEEK-ENDS OR TO SUIT CUSTOMER'S CONVENIENCE

LOVATT LTD. TILSLEY &

TRENTHAM, STOKE-ON-TRENT, STAFFS

Grams: "Diesel" Stoke-on-Trent

1

ivery many back (CI)

enue N.18

nter-pecial how ndard.

action (AM), 3559. SINES

tham. pins, erton,

1954, £250. 2070.

522 可

on O.

EL

D.

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

BOROUGH OF GLOSSOP.

GOR SALE. Wallis and Steevens 50cwt. PETROL ROLER (1935).

ROLER (1935). Surveyor, Municipal Buildings, offers to Borough Surveyor, Municipal Buildings, Glossop, and should reach him by First Post on WEDNESDAY, the 23rd August.

I. ARTHUR PUGH. Town Clerk.

Municipal Buildings, Glossop.

VAILABLE ex stock. — Two 81 b.p.h. Bray
to BL450TF 4-wheel drive TRACTOR SHOVELS and
to 91 b.h.p. Bray BL455T 4-wheel drive TRACTOR
SHOVELS, all with 15 c. u. vd. Buckets and disc
brakes. Juded on a few demonstrations and offered
with a six months' guarantee.—SEARCH, Leeds (Tel.:
Leeds 639081—10 lines), our SEARCH, Liverpool
(Tel.: Simondswood 3361).

FOR HIRE, Jules Weitz G15HVA TOWER CRANE, new 1960: immediately available: competitive rates. — J. J. JOHNSTON AND CO, LTD. 27 Uzbridge Road, London, W.12. Tel.: Shepherds Bush

CHETRAC TRACTOR, as new, complete with Cab, Winch Compressor, Charger, etc. Any inspection invited. Offers around \$1,250 considered.—INDUSTRIAL DISMANTLING STEEL AND PLANT, LTD., Water Lane, Exeter. Telephone: 74822.

FOR SALE, 1960 J.C.B. 4, choice of Buckets, tro., Staines 54111.

MODERN USED PLANT FOR SALE

1960 J.C.B. HYDRA-DIGGA, complete with Front shovel; three 6½cwt. Vibrating ROLLERS: three ½cwt. Johnson Diesel DUMPERS; ½yd. Benford Diesel DUMPER: KL22 CRANE, on four pneumatics; 10/7 Tilt Drum CONCRETE MIXER: Broomwade 110 c.f.m. COMPRESSOR, on four pneumatics, Lister Diesel; C.P.T. 120 c.f.m. COMPRESSOR, on two pneumatics, Ruston Diesel—both machines with overriding brakes; 10RB, Dragline and Backacter.

GOULD PLANT LIMITED NEWPORT, MON. Tel. 73121

FOR SALE

ALLIS-CHALMERS:

1944 Allis-Chalmers HD7, fitted with Hydraulic Angledozer and P.C.U., £500.
1949/55 Allis-Chalmers HD5G Tractor Choice of five. £1.300-£1.750.
1960 Allis-Chalmers HD6G Tractor Shovel, £6.000.

1960 Allis-Chalmers 8TL14D 112 cu. yd. Wheeled Tractor Shovel, £5,200.

FIAT: 1951 Flat 55L, fitted with Hydraulic Angledozer, £850.

1954 Fiat 55L, fitted with Hydraulic Angledozer, £950. 1954 Fiat 55L, fitted with Hydraulic Angledozer, £1,100.

WINCHES:

Carco E Timber Winches (Overhauled), £350.

MACKAY

of Feltham

Mackay Industrial Equipment Ltd. Central Way Feltham, Middx. (Feltham 3435-9

R GAD ROLLER SALE.
6-ton Wallis and Steevens, Diesel, water spray.
51,050.
71-ton Greens P/TVO, checked and sprayed. £650.
3-ton Greens P/TVO, checked and sprayed. £650.
5-ct. Gens Unirol, hand guided, footpath Roller.
£25.
6-cwt. Greens Vibrator, sprinklers, naw. £366.

5.225.
Sewt. Greens Vibrator, sprinklers, naw. £366.
Sewt. Greens Vibrator, sprinklers, good condition. £265.
12cwt. and 27/30cwt. New Greens Vibrating Rollers, ex stock.
Hire Purchase. Spares. Service.
WILLIAM R. SELWOOD, LTD.,
Chandler's Ford, Hants. Telephone: 2981.

Chandler's Ford, Hants. Telephone: 2981.

PLANT FOR HIRE.
TRENCHERS and COAL GRAB.
TRANT BEXCAVATORS, Draglines, Skimmers.
TRENCHERS and COAL GRAB.
TRANT BEXCAVATORS, Draglines, Skimmers.
TRANTS BEXCAVATORS, Draglines, Skimmers.
TRANTS DRAW STATE BEXCHAPTS.
TRANTS DUMPERS.
HOISTS. POWER PLANTS.
TRANTS OF THE STATE BEXCAVATION AND THE STATE BEAUTIFUL BEAU

Westcliffe ROBO, RUBANDSON,

TOTAL TRACTOR, No. 26937, with Bucyrus-Eric Bullgrader P22 P.C.U. £1,500.

Two Sykes at Legisland Force Diphragm PUMPS, with Petter liese Engine Bod each, TILBURY CONSTRUCTION CO. T.T.D., Ruscombe Works, Twyford, Berks.

Ruscombe Works, Twyford, Berks.

WANTED, Zenith 20 and 80 EXTRACTORS,
McKlernan-Terry 6 and 7 PILING HAMMERS
with Guides.—LEHANE, MACKENZIE AND SHAND,
LTD., Rowsley, near Matlock, Derbyshire. Telephone:
Darley Dale 3391.

Darley Dale 3391.

RAILS, RAILWAY LINE ATTACHMENTS, RAILWAY SLEEPERS of all grades and CROSSING TIMBERS from 8t. 6in. to 20tt. long for SALE. Deliveries ex stock. State use required for.—F. HIRD AND SONS. Armthorpe, Doncaster. Telephone: Armthorpe 339.

FOR SALE, 6-ton Ransomes-Rapier Standard Petrol/ Flectric MOBILE CRANE.— WILLIAM G. SEARCH. LTD. Whitehall Road, Leeds, 12. Telephone 639081 (10 lines).

GREENS new VIBRATORY ROLLERS, hand and tandems, immediate delivery.—DIAL-MEC, LTD., Caxton Hill, Hertford. Telephone: Hertford 3175. FOR SALE, 5-ton Electric DERRICK, 90ft. Jib, by Butters. — Write Box P.4518, "The Contract

FOR ALL PLANT HIRE

BARnet 2309

There is no better medium than

THE CONTRACT JOURNAL

for small classified advertisements

> Telephone for LINAGE RATES to WATerioo 3411

N 143 Hersham Road, Walton-on-Thames, Surrey, Telephone: Walton-on-Thames 23693/7.

19RB, 18794, Backacter or Shovel.

19RB, 20699, Backacter or Shovel.

10RB, 20699, any equipment, 1957.

10RB, 20699, any equipment, 1957.

10RB, 20699, Backacter or Shovel.

10

Ransomes-Rapier 423, Dragline Jib and Fairlead.
Chaseside 500, Ford Diesel, 1956, reconditioned

Chaseside 500, Ford Diesel, 1956, reconditioned Rengines. PAGLINE, SKIMMER, BACKACTER and SHOVEL EQUIPMENTS available for 10R8s, 19R8s and Winget 7/5. Diesel, Hydraulic, 1958, overhauled. MONORAIL—Wagons, Rails, Stands. Benford 15cwt. DUMPERS, 1958/59, overhauled. Caterpillar HT4 TRAKCAVATOR, 7U32634, Bucket and Rooter, ACM Rengines 612-10n ROLLER, Fordson petrol. Acc Master MOBILE MOIST.
Priestman 12/10 Double Rope GRAB.
Aveillar 12/10 Double Rope GRAB.
Aveillar 12/10 Double Rope GRAB.
Onloss Winch D4 TRAKTOR.

Onlone State D4 TRACTOR.
Set 388 TRACKS.
10RB FACE SHOVEL BUCKET.
NOBLE PLANT AND ENGINEERING CO.,
143 Hersham Road, Walton-on-Thames. Surrey.
Tel.: Walton-on-Thames 23693/7.

Tel.: Walton-on-Thames 23693/7.

FOR SALE, John Deere Crawler LOADER, 831, 1960, complete with 7₈ cu. yd. Bucket, 3-tine Ripper, Steel Cab, direction reverser, all latest modifications that direction reverser and latest modifications that direction reverser and latest modifications that direction reverser, all latest modifications that direction reverser, all latest modifications that continued the recent transfer of the recent personal research to the recent personal reverse and the recent personal research to the recent personal recent personal recent personal reverse and recent personal reverse and recent personal recent personal reverse and recent personal reverse and recent personal rec

Brando New and Unused Delmag G17T PILE
FRAME, with Diesel Winch and Turntable, etc.
Pre-increase price.

9 Palace Street, London, S.W.1. Tel.: ViCtoria 0252.

WANTED, Muir-Hill 3 cu. yd. 108 DUMPER, either
petrol or Diesel model, must he first-class.
NORMAN WALKER (MACHINERY), LTD., Aniaby,
Hull.

FOR SALE, MOBILE CRANES, TD18 International BULLDOZER, 4T Caterpillar D7 BULLDOZER CAUDLE, LTD., Sheldon, Birmingham. Tel.: 5he 5171 FOR SALE, Caterpillar 463 SCRAPER, £4,000 o.n.o. Write Box P.4561, "The Contract Journal."

FOR SALE
Lima 2400 EXCAVATORS, with Dragline and Forward
Shovel. Choice of four.
Marion 111M EXCAVATORS. Choice of two.
Lima 1201 EXCAVATORS. Choice of two.
Ruston 100B EXCAVATOR. Diesel/Electric.
All machines in excellent condition, may be seen
working, and are essen to any inspection and trial.
Immediate delivers.

Call, write or 'phone: A.R.C. MOTOR CO., LTD., Redhill Works, Arnold, Nottingham. Tel. 26-3331/5.

NEAL'S (PLANT HIRE) L" SERVE THE SOUTH

Immediately available for hire on the South Coasti—

Excavators, Tracto-Shovels,
Mobile Compressors,
Fergusons, Mobile Cranes,
10 BD 3 c.y. Diesel Dumpers,
Petrol and Diesel Rollers,
Concrete Mixers, etc., etc.

All enquiries promptly deals with

Chichester 3777-8-9

COVENTRY

PROPRIETOR : ALEC STATHAM LTD.

BRANDON ROAD, BINLEY, COVENTRY TELEPHONE: WALSGRAVE ON SOWE 3113



Lorry mounted Crane Hire fleet. Capacity 2 to 25 tons. Jib lengths to 120 ft. Fly Jibs to 20 ft. Country wide service.

SCHEID Vibrating Tandem Rollers are already used on many road schemes in this country Telephone: ELGar 6777 (4 lines)

EQUIPMENT LIMITED

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

TOR BALE.
Jones KL44 CRAWLERS, 30ft. Jib, 1857, £1,000.
8-ton Morgan DERRICK, 85ft. Jib, Electric, \$750.
5-ton Butters DERRICK, 85ft. Jib, 1955, Electric, £1,750.
7-ton Butters Mono TOWER CRANE, 109ft. Jib, 40ft. Tower, Electric, £1,250.
7/1/4-05.55.750.
1950 E.S.750.
20-ton Morgan DERRICK, 115ft. Jib, Electric, £8,500.
Priestman Orange Peel GRAB, 24 cu. ft., S.C.R.D., £5325. 20-ton Morgan DERRICK, 115 It. Jib, http://dx.dec.up/ Priestran Orange Peel GRAB, 24 cu. ft., S.G.R.D., \$125.25 Semi-circular GRAB, 15 cu. ft., S.C.R.D., Westwood Semi-circular GRAB, 15 cu. ft., S.C.R.D., £75. CRANE SKIPS, 12 to 2 cu. yd. capacity. Goodenouph PUMPS, 12 in. to 6 in., Petros and Diesel. New Maximixam CONCRETE MIXERS, 3/2 to 7/5. New Maximixam CONCRETE MIXERS, 3/2 to 7/5. Maco PIPELAYING WINCHES, 12-ton to 2-ton, and PIPE DOGS, all sizes and capacities. Aew ROADFORMS, 6in. to 10in. section. CONCRETE PLACING SKIPS, 12 to 2 cu. yd. capacity. M.E. ENGINEERING, LTD., 457 Finchiev Road, London, N.W.3. Mengillin, London. "Phone: MAMpstead 7481-2-3.

SUPPLEMENT

Mengilim, London. 'Phone: HAMpstaad 7481-2-3.

TO CRANE USERS. — Ten Brand New Perkins
P3 Diesel INDUSTRIAL ENGINES, complete with
Self-starters, Dynamos and Kit of Tools, Delivered from
Anna Photograph on request. — NORMAN WALKER
(MACHINERY), LTD., Anlaby, Hull. Tel.: Kirkelia
57967.

IF YOU WANT to PURCHASE or HIRE any
CONTRACTORS' PLANT, please set in louch
with METAL UNION (PLANT), LTD., 75 Victoria
Street, London, S.W.1. Telephone: ViCtoria 4868/9,
7429, 2177/6.

FOR SALE. 18/12 Rex Closed Drum CONCRETE MIXER, with or without Built-in Welgher, in good working order.—W. V. DAVIES, Concrete Mixer Service, Shipston-on-Stour. Phone 125.

INER 3A Cumflow, virtually new, Invarac Tank, 5ft. discharge, complete with all Electrics and Storage Hopper. £1,500, or nearest offer.—Write Box P.4630, "The Contract Journal."

FOR SALE, 3-ton Hand DERRICK, 60ft. Jib, Butters make. — Write Box P.4519, "The Contract Journal."

USED

with a

EQUIPMENT

GUARANTEE

CHASESIDE ED EQUIPMENT

DIVISION

IF YOU REQUIRE A RELIABLE USED MACHINE, YOU NEED LOOK NO FARTHER THAN HERTFORD.

LOOK NO FARTHER THAN

LOOK NO FARTHER

SK.1148.—1955 LOADMASTER 510. Perkins LA Diesel Engine, All-weather Cab, Lighting. 1 cu, yd. Toothed Scoop, good tyres. Seen HERTFORD 241. In very good order. Seen HERTFORD 1956 LOADMASTER SOO. F. 5950 Co. 1 co

PLANT HIRE SERVICE (LONDON), LTD. OFFER THE FOLLOWING PLANT FOR HIRE: G1_cwt. Stothert and Pitt Vibrating ROLLERS. MIXERS—3/2 Liner Petrol, 5/31-2 and 7/5 Liner Diesel driven, 10/7 Stothert and Pitt Diesel

Diesel driven, 10/7 Stothert and Pitt Diesel driven.

10cwt. Comet MOBILE HOIST, with 24ft. Mast and 11ft. Extension.

5/10cwt. A.C.E. HOIST, Diesel driven, with 25ft. Mast and 11ft. Extension.

Pegson RAMMER, petrol driven.

Warsbop ROADBIEAKLES, petrol driven.

LIFTING TACKLE—1-ton Blocks and 3-ton Blocks.

2-tool Portable COMPRESSOR, with tools.

15cwt. Neals Portable CRANE, petrol driven, with 15ft. Jib.

SHOVELS—Drotts 7a cu. yd. and 4-in-1 equipments; Weatherill 1 cu. yd.; Chaseside 12 cu. yd.

TRACTORS—04, D6 and D9, with Scraper Attachments.

ments.
DUMPERS—12 cu. yd. to 1 cu. yd. Johnson; 3 cu. yd.

ments.

DUMPERS—12 cu. yd. to 1 cu. yd. Johnson; 3 cu. yd. Mulr-Hill GMACHINES, all complete with 9in., EARTHORNIG., 16in. and 24in. Augers.

ROLLERS—50cwt. to 10-ton Diesel.

1 Chatfield Road, Battersea, 5.W.11.

Telephone: Battersea 9218 (3 lines).

DROTTS for SALE. — International BTD6 Drott 90cM withing order. Cleaned, repainted and retransferred. Several in stock. From £1,950-£2,100 ea. Straight Road, 01 Windsor, Berks. Tel.: Windsor 3434 or 3384.

STEEL SHEET PILES, TRENCH SHEETS and PROPS Urgently WANTED. All sections bought; large and small quantities. Immediate payment. DUDLEY VALE, LTD., Palace Street, London, S.W.1, Tel.: ViCtoria 0252.

W A N T E D , ALL TYPES OF CLETRAC TRACTORS, any condition.—State Serial No. and price required.—C. J. THORNE AND CO., LTD., Uckfield, Sussex. Telephone 178 (3 lines).

FOR SALE, 3,500lb. STACATRUC, 9ft. lift. William G. SEARCH. LTD., Whitehall Road. Leeds, 12. Tel. 639081 (10 lines).

F OR SALE.
Caterpillar D4, wide gauge, fitted L.P.C. Dozer,
£850.
Caterpillar D4, standard gauge and L.P.C. Angledozer,
£275.
Caterpillar D4, standard gauge, fitted Hyster Winch,
£650.

E650.

Altis-Chalmers HD14, fitted Dray 1, 252.

Allis-Chalmers HD14, fitted Dray 2, 252.

Fordson County, fitted Dozer, £750.

Allis-Chalmers HD7, fitted Dozer, £750.

Fordson County, fitted Bray Hydraulic Equipment, £825.

Allis-Chalmers HD7, fitted Dozer, £325.
Fordson County, fitted Bray Hydraulic Equipment, £285.
Catenilis R4, fitted Hyster Winch and Dozer, £215.
Catenilis R4, fitted Hyster Winch and Dozer, £215.
Catenilis R4, fitted Hyster Winch and Dozer, £215.
Cowled R4, Representation of the State County of the State

FOR SALE or HIRE, Latest type AIR LOCKS, LF.
COMPRESSORS and MEDICAL LOCK for Calegon
sinking. — A. E. FARR (PLANT HIRE), LTD.
Westbury, Wilts. Tel. 358.

FOR SALE, 2-tool C.P.T. COMPRESSOR.—B.G.
PLANT (SALES AGENCY), LTD., Watlington,
Oxon. Watlington, 44.

SLOGGETTS PLANT HIRE

COMPRESSORS OF ALL TYPES

2 Burtons Road, Hampton Hill, Middx. Telephone: Teddington Lock 1139/9

ROAD ROLLERS

FOR HIRE OR SALE

with or without'drivers
HALTRAC LIMITED Bourne Works, Welmar Street, S.W.IS PUTney 4185

FOR SALE and HIRE

Drott Skid Shovels J.C.B. Excavators Air Compressors 110 to 630 cu. ft. **Vibrating Rollers Pumps Diesel Driven** Parker Concrete Mixers Platform Hoists **Diesel Welding Sets** Crane Skips 5 cu. ft. to I Yd.

JOSEPH THOMPSON & CO. (LIVERPOOL) LTD. Wakefield Road, Netherton

Liverpool, 10 Tel: Aintree 6262

PLANT SALES LTD.,

25 CASTLEREAGH STREET, LONDON, W.1 Telephone: PADdington 2663-4

ARUPS EALING 4754 - ARUPS

EALING 4754 ARUPS EALING **ARUPS EALING** 4754 4754 ARUPS EALING 4754 ARUPS
EALING 4 TOP S EALING
4754 ARUPS EALING 4754 ARUPS
EALING 4754 ARUPS EALING

ARUPS **EALING** 4754 4754 ALING 4754 ARUPS EALING G 4754 ARUPS ARUPS EALING EALING 4754 ARUPS ARUPS EALING 4754 ARUPS EALING

EALING 4754

ARUP & ARUP LTD., 84/88 UXBRIDGE RD., LONDON, WJ

FOR HIRE

OMPRES OR -600 C.F.M.

J. W. COX PLANT HIRE LTD.

QUARRY BANK, BRIERLEY HILL, STAFFS.

Phone: CRADLEY 66266

machine all round, at very keen price. Seen HERTFORD

\$1.375

SK.1634.—1-ton CHASESIDE Mobile Crane, fitted with Fordson Diesel Engine (reconditioned), new tyre all round. A bargain. Will be ready in approx. 14 days pecial. OFFER. \$600

CHASESIDE LOADMASTER 1000 (ex demonstration machine), fitted with 1½ cu. yd. capacity Toothed Scoop. Four-wheel Drive. Planetary Reduction Gear on all wheels, Fordson Diesel Engine, Torque Converter, power steering, All-weather Cab, tyres good (1400 x green steering, All-weather Cab, tyres good (1400 x green steering), all-weather Cab, tyres good (1400 x green steering), all-weather Cab, tyres good of the steering of Construction Equipment, a number of Used Loading Shovels of other manufacture, such as Bray, Muir-Hill and Weather!!!, etc.

CHASESIDE ENGINEERING CO., LTD., Used Engineer Division.

Sational Washer and State States.

TAS/UED. TAS/HED100

Lincoln 300 amp portable diesel.

Tel: TOTtonham 0401 (10 lines

61

Dozer,

Winch

£750

£215.

£245 AILER

75.

fit all ackacter isl and it. 4in. O days.

hauled ID CO therton S. L.P. Calsson LTD.,

.—B.G. lington,

S

W.1

CUPS G S S

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:
EXCAVATORS:
SMITH 7, 12800 Series, Backacter, Skimmer and/or
FS, good condition, £700.
PRIESTMAN WOLF, F/S and Backacter, 1951, Dorman
SMITICSUPER 10, Dragline, 1950, £1,000.
1088, 17000 Series, F/S, very good condition, £1,650.
1988 EXCAVATOR, Dragline, very good condition, £1,650. 1988 EXCAVATOR, Draguine, very good condition, \$2.450.
PRIESTMAN TIGER, 1958. Dragline, \$3.350.
1988 EXAVATOR, 17000 Series, F.S. good condition, \$2.500.
PRIESTMAN TOR, 21000 Series, F.S. good condition, \$2.500.
N.C.K. 304, 70ft. Dragline Crane Equipment, 1900.
Series, good order, \$3.150. ARNE, 45.60ft. Jib. Cateroliar Diesel, very good condition, £3.150.
3088, 23400 Series, lack-re, Ber August, 1938.
Weeks, 23400 Series, lack-re, Ber August, 1938.

weeks. 38R8, 19000 Series, Dragline and F/S, good condi-tion. Price on application. 378E, 11000 Series, Dragline. Price on application. 48R8, Early Series, Dragline, good condition, £4,000 43RB. Early Series. Dragline, good condition. Exclode each.
54RB.000 Series. Dragline, good condition. Price
on application.
LIMA 1201. Dragline and or F'S, 1700/32000 Series.
From £5.500 each.
FOR A COMPREHENSIVE LIST OF PLANT FOR SALE
AND HIRE—SEND FOR VALES FREE PLANT
REGISTER.

FOR VALES FREE PLANT
Further details: 14 Lower Grosvenor Place, London,
S.W.1. Victoria 7531, 3501, 8808, 9886 (15 lines).
FOR SALE, 19RB BACKACTER EQUIPMENT,
Complete and in good condition: also Ruston
(LONGRIDGE), LTD. Little rm.—BROWN BROS.
(LONGRIDGE), LTD. Little rm.—BROWN BROS.
FOR SALE or MIRE. Barber-Greene Junior, new
1959 FRED. WATKINS (ENGINEERING), LTD. Coleford
Glob.

FOR SALE, John Deere-Lanz TRACTOR, fitted with Perkins P3 Engine, new July 1960, recently fitted with driver's cab.—WILLIAM G, SEARCH, LTD. whitehall Road, Leeds, 12, Tel. 639081 (10 lines)

POR SALE. 10RB, with Backacter, or would part exchange for Drott Shovel.—R. BARKER (PECK HAM), LTD. 10a Ellery Street, Peckham, S.E.15. Telephone: New Cross 3337.

VANTED. BATCHING PLANT, suitable 150/200yd, Lean Mix: also a Drott SHOVEL, three 412yd. DUMPERS, and 18/12 and 14/10 MIXERS.—Write Box P.4483, "The Contract Journal."

POR SALE. Butters DERRICK, 5-ton capacity, 90ft.
Jib, mounted on Bogies, new 1948, and in excellent condition.—M. MACLEAN, LTD., Holt Road, Cromer, Norfolk.

D.112.—Bristol Duplex Overloader, 1959.
Carefully maintained
MiSCELLANEOUS:
1.106.—Dinkum Digger, Mk. III, 1957, fitted
Whitlock Dozer-loader Front Shovel, and
c/w Dozer Blade. Overhauled and repainted,
17yres almost as new
1.05a.—J.C.8. Hydra-Digga/Loadall, £725
1.05a.—J.C.8. Hydra-Digga/Loadall, £725
1.05a.—J.C.8. Hydra-Digga/Loadall, £725
1.125a.—Ransomes-Rapier 424 % £1.793
1.125a.—Ransomes-Rapier 424 % £1.793
1.125a.—Ruston-Bucyrus 1988, 19000 Series,
1.129.—Ruston-Bucyrus 1988, 19000 Series,
1.125.—Ruston-Bucyrus 1988, 190

PLEASE ASK FOR FREE DEMONSTRATION.

GABRIEL MACHINERY CO. LTD.

Stock No. TRACTOR SHOVELS:

P LANT FOR SALE. Two 2-tool MOBILE COMPRESSORS, Atlas-Copco NT9V, with Dorman 48K11 Engines, electric starting, mounted on Bedford short-wheelbase

chassis.
dbent 14In. x 54in. S.S. CENTRE LATHE, motorised, 31₆in. hollow mandril, 12 spindle speeds,
6.7-230, c/w 24in. faceplate and 12in. Four-jaw

chuck.
One Dorman 4DS CYLINDER HEAD.
Several Parker 5,312 CONCRETE MIXERS.
SKIMMER BUCKET for Tiger Mk. V Excavator.
WILSON PLANT HIRE, LTD.,
Weedon Road, Northampton.
Telephone: Northampton 4653 and 4654.

Telephone: Northampton 4653 and 4654.

OR S A L E.

10RB, with Swan Neck Crane Attachment, sound and the state of the stat

TO EXCAVATOR USERS.—Ten Brand New Perkins P3 Diesel INDUSTRIAL ENGINES, complete with Self-starters by Nemos and Kit of Tools. Delivered with makers in 1957 and makers of the Self-starters of the Se

DELMAG Diesel PILE HAMMERS for HIRE. Models DS. D12, D22, available with Rope-suspended Leaders and leg guides; suitable for driving any section of piles. Also G17T Delmag PILE FRAME, with Turntable and Diesel Winch. With Commander of the Commander of t

9 Palace Street, London, S.W.1, Tel.: Victoria 0252.

VANTED, 15: 20-ton Lorry-mounted CRANE, Diesel Electric preferred.—SAVILLE-CALVERT CMACHINERY), LTD., Harvester House, Stratford-on-Avon, Warwickshire. Tel. 4242.

VANTED to PURCHASE, 19RB and 22RB EXCAVATORS, in first-class condition. Full details, including prices and locations for inspection. Write Box P-4845, The Contract Journal.

WANTED, Broadbent 36 x 9 Single Toggle JAW
GRANULATOR. — TILBURY CONTRACTING
AND DREDGING CO., LTD., Thames Street, S.E.10. SALE. 5-ton 2-motor Electric DERRICK, 120ft. b. Butters.—Write Box P.4520, "The Contract

WANTED, Diesel driven COMPRESSOR, 300 to 500 cu. ft. per min. — HAMILTON AND PRESTON, Enniskillen, N.I.

A XWORTHY OFFER FOR SALE.
P. and H. 6SSB CRANES, Cummins Diesel Engines, new 1951.
Several State of the State

Angledozers.
Caterpillar D8 13A TRACTORS, Caterpillar BA
Hydraulic Angledozers and Buildozer, 25 C.C.U.
Caterpillar DW20 TRACTOR SCRAPERS.
Caterpillar D7 7M TRACTORS, Cable and Hydraulic

Hydraulic Angledozers and Bulldozer, 25 C.C.U.
Caterpillar DW2 O TRACTOR SCRAPERS.
Caterpillar DW2 O TRACTOR SCRAPERS.
Caterpillar DY3 TM TRACTORS, Cable and Hydraulic
Angledozers.
Euclid S18 MOTORISED SCRAPERS, G.M. Engines.
Caterpillar D8 8R TRACTORS, Cable Dozers, Winches
and Scrapers.
International BTD20 Drott SKID SHOVELS.
International BTD20 Drott SkiD SHOVE

Continental CD72 TRACTORS, with Angiestal Continental CD72 TRACTOR, with Hydraulic Dozer, new August, 1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

1960.

Virtually unused and in ALEPAN, LTD., £345WORTHY AND COMPANY, LTD., Straight Road, Old Windsor, Berks. Telephone: Windsor 3434 or 3384, Telegrams: Axworthy, Windsor.

GABRIEL CYMRIC PLANT **FOR HIRE** D.113.—International Drott Skid-Sho B6K3, May, 1957, Standard Bucket. Sci | Drott | Skid-Shovel, B6K3, May, 1957, Standard Bucket, Seen working | Drott | Skid-Shovel, B6K3, September, 1957, Standard Bucket, B6K3, November, 1959, Standard Bucket, Seen working | Drott | Skid-Shovel, B6K3, November, 1959, Standard Bucket, Seen working | Drott | Skid-Shovel, B6K3, June, 1959, 4-in-1 Bucket, Overhauled, New tracks | Drott | Skid-Shovel, B6K3, Shovel, B6K3, June, 1959, 4-in-1 Bucket, Overhauled, New tracks | Drott | Skid-Shovel, B6K3, June, 1959, 4-in-1 Bucket, Overhauled, Skid-Shovel, B6K3, June, B6K3, SHAWNEE-POOLE

DUMP TRUCKS Delivered anywhere in U.K.

BRIDGEND, GLAM. Tel: 2258

PLANT LTD.

CONTRACTORS' PLANT FOR SALE

DINKUM DIGGER Major, late 1958, with 3yd. Muir-Hill DUMPER, 108, with Fordson 4D Engine £300 Parker 5/312 CONCRETE MIXER, Petter Diesel. New 5186 Road Machines 15cwt., 2212cwt. and 30cwt. Diesel DUMPERS. Ex stock. Large HIRE FLEET of J.C.B.s, DUMPERS, Drott SHOVELS, VIBRATING ROLLERS, etc. PETTER ENGINE SPARES

Telephone: HATCH END 6221 4 THE MEAD, CARPENDERS PARK

WATFORD

KINGSTON PLANT HANWORTH . MIDDX. FOR BULLDOZERS AND ALL PLANT HIRE FELTHAM 4084

MARSH PLANT



DISTRIBUTORS

HAMPSHIRE AND WEST SUSSEX

J.C.B. HYDRA-DIGGA/LODALL 65, mid-1958
machine. Good choice of equipments ... 51.500
J.C.B. HYDRA-DIGGA/LODALL 65, late
1958 machine. Choice of equipments \$1.500
J.C.B. HYDRA-DIGGA/LOADALL 65, late
1959 machine. Choice of equipments. Repainted. Very good ... 51.700
J.C.B. LOADALL 65, 70 cu. yd. Bucket £850
RANSOMES 410 EXCAVATOR, Skimmer
Backacter. Recently reconditioned. Offers.
Exchanges.

Extensive choice of small Contractors' Plant. EXTENSIVE CHOICE of CONCRETE MIXERS.
All sizes. All prices. Inspections Invited.

For HIRE - SALES - SERVICE 'Phone: EMSWORTH 2032-2634.

MARSH PLANT & MACHINERY CO., LTD. SOUTH STREET, EMSWORTH, HAMPSHIRE.

Palmers Lane, Enfield, Middlesex. Telephone: Howard 4351/4 (Daytime) Enfield 9648 (Evenings).

TOTtenham 0401 (10 lines)

Ace Comet mobile and Midget scaffold.

ING 4754 RUPS ING 4754 RUPS ING D

4754 STIPS LING 4754 RUPS ING

14

266

★Further Classified Plant Advertisements on pages 717-724

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

MODERN PLAMT FOR HIRE, with experienced operators and backed by an efficient service MODERN PLAMT FOR MIRE, with experienced organisation:—

STATE OF THE PROPERTY
131 High Street, Cheshunt, Herts.

Tel.: Waitham Cross 25161 (5 lines).

Tel.: Waitham Cross 25161 (5 lines)

6 Albert Road North, Reigate, Surrey, Reigate 2047.
SURPLUS CONVEYOR BELTS. New, unused and second-hand. Most widths up to 36in. In stock for immediate delivery. Second-hand Beits supplied on sale or return ball.
G. E. SIMM (MACHINERY), LTD.,
Sheffield: 27 Broomrove Road, Kirkellilloch (Tol., 36438), London: 33 Luggle Ban Road, Kirkellilloch (Tol., 2468). London: 33 Logsway Trading Estate, Bridgend
South Wales: 1.F.5 Kingsway Trading Estate, Bridgend

(Tel. 1567).

ARSSEN PILES FOR HIRE, 100 tons brand new Larssen 2 Sections, 30ft. long. Various lengths and sections of other piles available immediately ex depot.

DUDLEY VALE, LTD., eet, London, S.W.1. Tel.: VICtoria 0252. DUDLEY VALE, LIGHT OF STREET OF THE STREET OF
FOR HIRE In Leicestershire and adjacent counties.
Coles and Hydrocon MOBILE CRANES and J.C.B.
EXCAVATORS.—CREESE PLANT HIRE, Thurmaston.
Leicester. Syston 2932/3.

FOR SALE, 5-ton Steam LOCO., 54ft. Jib, by Butters. — Write Box P.4521, "The Contract Journal."

CRANES FOR SALE FROM OUR OWN STOCK.
Test certified before despatch. Test certified before despatch.

812-ton Rapier Super Diesel/Electric, pneumatics.

7-ton Rapier Fast Standard Diesel/Electric.

5-ton Coles Thornycroft, Series 7, Mark 7, wire derricking.

5-ton Michigan Lorry Crane, Dorman Diesel, 25ft. derricking.
Ston Michigan Lorry Crane, Dorman Jib.
Jib.
Geton Rapier Standard Petrol/Electric, on solid rubbers.
212-ton Morris Petrol/Electric, pneumatics, electric 212-ton Morris Petrol/Electric, preumatics, start.
4-ton New Staffa Diesel/Hydraulic, pneumatics, 3-ton Taylor Jumbo Diesel/Hydraulic, pneumatics, 13-yd, Hydraulic Grab.
2-ton Neals NM. Ruston Diesel, pneumatics, 30ft. 13-yd. Hydraulic Grab.
2-ton Neals NM. Ruston Diesel, pneumatics, 30ft.
Jib.
2-ton Neals NM. Ruston Diesel, pneumatics, 24ft. Jib.
2-ton Jones KL22, Diesel, pneumatics, 24ft. Jib.
2-ton Jones KL22, Diesel, pneumatics, 24ft. Jib.
2-ton Graber States State

BARGAIN NEW SURPLUS HAND AIR TOOLS.
7 sin. and 11 sin. C.P.T. Boyer Longstroke
Pneumatic HAND RIVETTERS, £14 each.
7 sin. C.P.T. 315/350 Power Vane Pneumatic HAND
DRILLS, £25 each.

DRILLS, £25 each.
L. SOLLOMAN, LTD.,
1 Beaufort Street, Manchester, 3. BLAckfriars 4571. POR SALE, Benford 18/12 Reversing Drum Diese MiXER, with Weighgear and Dragshovel, new November, 1957, Just reconditioned, including new drum lining, blades, dial and capsule, exchange hydraulic ram and engine, £775.—]. J. JOHNSTON AND CO., LTD., 271 Usbridge Road, London, W.12. Tel.: Shepherds Bush 6941.

FOR SALE, Two Aveling-Barford GRADERS, Model 99H, powered by Leyland Diesel Engines, in excellent condition.—Apply EARTHSTRIP, Wakeneld Road, Hampole, Doncaster.

FOR SALE, C.P.O.A.C. CONCRETE PLACER, type G350F, with Discharge Box, 120ft. 6in. diameter Piping, Bends, and 105 cu. ft. Air Receiver: 18 months' old, little used.—Telephone: Derby 47081.

W A N T E D. Goton Rapier Standard Crane.
Disel Taylor HYDRACRANE.
Write 8ox P.4625, "The Contract Journal."

NEAGRON (CONSTRUCTION), LTB.

OFFER FOR HIRE:

N.C.K., 304 8-ton CRAWLER CRANE, with 60ft. Boom and Fly Jib.

NEALS QM 4/0-ton capacity MOBILE CRANES, Jibs from 24/60ft., heavy duty pneumatics. With Grabs If required.

NEALS 2-ton MOBILE CRANES, SID.

NEALS 2-ton MOBILE CRANES, MOUNTED CRANES, SID.

NEALS 15cwt. MOBILE CRANES, COLT. Lattice Jibs.

NEALS 15cwt. MOBILE CRANES, 2014.

NEALS 15cwt. MOBILE CRANES, 2014.

NEALS 15cwt. MOBILE CRANES, COLT. Lattice Jibs.

NEALS 3/4-ton capacity CRAWLER-MOUNTED CRANES, LOTE.

COLES and LORAID 5/25-ton capacity LORRY.

MOUNTED CRANES.

LIMA 802 30-ton capacity CRAWLER-MOUNTED CRANE, fitted 80/100ft. Jib. with 8ack Hitch CRAWLER MIXERS, 15/12, 7/5, 10/7, 14/10 and 21/14 cu. ft. capacity. Diesel-powered, high or standard discharge, with integral Weighpear and Hand Scrapers.

DUMPERS, Diesel, 2/4/2 cu. vd. capacity. With 10 and drive.
CHINOOK HEATERS, all models available.
FURTHER DETAILS:

Abbey House, Victoria Street, London, S.W.1.
Telephone: ABBey 5152. Sullivan 7626 (10 lines).

B U C K E T S P E C I A L I S T S. — Special end
Standard SHOVEL, TRENCHER, GRAB and
DRAGLINE BUCKETS to suit all machines. Quit
delivery. Write or 'phone the makers: NORTOMS
PLANT HIRE, LTD., Billericay, Essex. Tel.: Ramados
Heath 365.

A VAILABLE for HIRE and CONTRACT: D9 and D8 TRACTORS, with Blade or Scraper.—ELLIOTT, Wetherby Road, York. Telephone: 78220 and 78501. Wetherby Road, York. Telephone: 70220 and 701

WANTED. 2,000/6,000lb. FORKLIFT TRU
Diesel, Petrol or Electric.
Write Box P.4569, "The Contract Journal."

BRAY BL25 CRAWLER, 1957, rebuilt, guaranteed, £1,300. — Apply AUTOWAYS (1931), LTD., Hereford Street, Sheffield, 1. Tel. 77313.

USED DIGGERS & LOADERS FOR SALE

10RB, 5000 Series, Skimmer/Backacter£46	5
10RB, 10000 Series, base unit£25	0
10RB, 15000 Series, Face Shovel£1,32	5
J.C.B. Mk. II DIGGER and Loader£75	
J.C.B. HYDRA-DIGGA and Loader£1,07	5
J.C.B. HYDRA-DIGGA/LOADALL£1,67	5
Bray HYDRALOADER and Skyhl£55	0
Whitlock 4-wheel drive DOZALOADA£72	5
Bristol DIGLOADER, Perkins P3£1,02	5
33RB. with Dragline£1,76	5

Sole West Midland Distributors for J.C.B. Excavators, Joy-Sullivan Compressors, and Blaw Knoy and Allam Concrete Equipment

MODERN PLANT SALES LTD

WOLVERHAMPTON ROAD OLDBURY BIRMINGHAM Tel: Broadwell 2571

19 & 33 R.B.s T.D. & H.D.148 **MERTON OVERLOADERS** FOR HIRE

SAND & SHINGLE LTD. FAGGS RD., FELTHAM, MIDDX. FELTHAM BO45

WELDERS

300 amp. LINCOLN PORTABLE DIESEL SETS

FOR HIRE

Very Keen Rates-For Long Term Hires

MOORE'S PLANT LIMITED 105-129 MARKFIELD ROAD, N.15 Phone: TOTtenham 0401/8

BEN TURNER & SON (TRACTORS) LTD.

FOR SALES, SERVICE AND HIRE



MASSEY-FERGUSON INDUSTRIAL EQUIPMENT

PHONE:-RIPLEY (SURREY) 2481/2

WINGET WORKS ROSEHALL COATBRIDGE

SERVICES LIMITED COATBRIDGE & EDINBURGH

1232/3 YOUR SERVICE IN SCOTLAND

MIXER & VIBRATOR HIRE

3/2 cu. ft. to 14/10 cu. ft. capacity Concrete Mixers, and Petrol Vibrators.



C

A

T D.

ilina Vith

ibs.

TED

cwt.

ZRB ngs. TO-389

CER ctrie

teed,

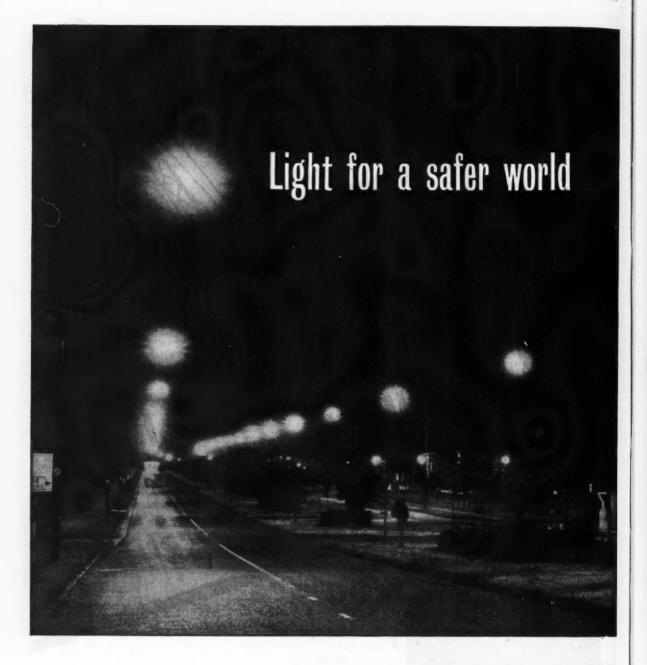


lustrated above is the new "Weserwolff" Illustrated above is the new "Weserwolft" Mobile Excavator/Crane—one of the many interesting machines which will be on show.

Amongst the equipment to be shown by Audax will be Props, Trench Struts, Road Forms, Beam Clamps, Trestles, Splitheads, Column Clamps, Rollover Skips, Concrete Hoppers, Elephant Trunking, etc./etc. Tuesday, 15th, Wednesday, 16th, and Thursday, 17th August 1961, from 10 a.m. to 5.30 p.m.

WINDMILL LANE, THAMES DITTON, SURREY. Tel: EMBerbrook 2800/1 & 5511 (Night 6147)

AUDAX GENTRAL AVENUE, WEST MOLESEY, SURREY. TELEPHONE: MOLESEY 6071



With road safety a major consideration, this \(^3\)-mile stretch on the main Glasgow-Edinburgh road is now lit by 52 highwattage Sodium lamps developed by Philips Electrical Ltd. The new system was largely the inspiration of Mr. Denis Colvin, City Lighting Engineer to the Glasgow Corporation, who co-ordinated the activities of Philips on lamps and gear, the Engineering & Lighting Equipment Co. Ltd. in their development of the new ELECO Golden Ray '280', and of Messrs. Stewarts and Lloyds, who provided the special steel columns. In operation, it is no longer possible for confusion of light sources to be an accident hazard, and the reduction of the number of columns used reduces the number of possible collision points.

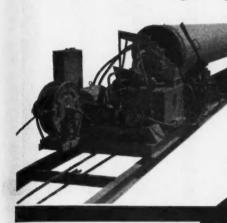
PHILIPS ELECTRICAL LTD · Lamp & Lighting Group
Century House · Shaftesbury Avenue · London · W.C.2



CROSE THE WORLD'S FINEST EQUIPMENT FOR PIPELINE GRID SCHEMES

YOU CAN COAT AND WRAP PIPE EASIER—

FASTER — and at greatly reduced cost ...



WITH THE NEW

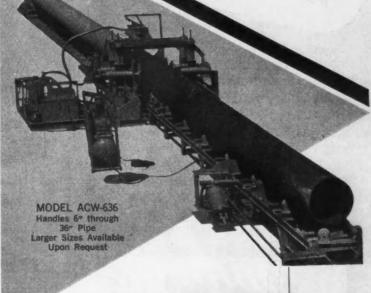
CROSE

SEMI-AUTOMATIC STATIONARY COATING & WRAPPING MACHINE

COMPLETELY ELIMINATES PIPE COUPLERS (Come-Alongs)

- · Cuts Operation Costs Requires Only Five-Man
- · Designed for Continuous Heavy Duty Service
- · Handles Larger Pipe Sizes Easier
- . Quickly Adjustable to Different Pipe Sizes
- Automatic Feed-In Mechanism with Powered Input Conveyor
- · Handles Crooked or Out-of-Round Pipe
- · Hydraulic Powered

For complete details on how you can greatly reduce pipe coating and wrapping costs, write today for full information on the new Crose Semi-Automatic Stationary Coating and Wrapping Machine.



EQUIPMENT

Write for complete descriptive literature to:-SOLE AGENTS & DISTRIBUTORS FOR GT. BRITAIN & COMMONWEALTH COUNTRIES

A. LONG & CO. LTD., 45 Parliament St., London, S.W. I

TELEGRAMS: AYELONG, PARL, LONDON.

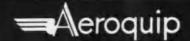
TELEPHONE: WHitehall 5064/5, 6577



It depends what you are talking about. If it's hydraulic hose we can deal you all the trumps with Hyline or Aeroquip. Both are flexible hoselines working over a wide range of pressures. Aeroquip has detachable, re-usable end fittings which enable you to make up your own hoseline in a matter of minutes; whilst Hyline has swaged-on end fittings forming a complete and permanent unit. It's safe to play cards with us — we always deal the trumps to our customers.

Hyline

HUBERT H. P. TRIST & CO. LTD.



Corrugated Sheets, Plates, Angles, Tees, Channels, R.S. Joists, Reinforcing rounds for immediate delivery. Profile Cutting to customer's requirements



BIRMINGHAM

Scapa Works Langley Green Oldbury, Birmingham Tel: Broadwell 1611 Telex 33183 MANCHESTER

Frederick Road
Pendleton
Salford 6
Tel: Pendleton 2481
Telex 66448

SHEFFIELD

Scapa Works Wadsley Bridge Sheffield, 6 Tel: Sheffield 344391 Telex 54205 LONDON

Scapa House Park Royal Road London N.W.10 Tel: Elgar 5811 Telex 25239

And at Newcastle, Bedford, Cardiff, Bow, Coventry and Belfast

ALMETAL INDUSTRIES M GROUP COMPAN

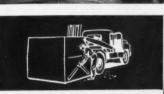
NEW!

DEMPSTER DUMPSTER SETS NEW STANDARDS IN **MATERIALS**

HANDLING



man one truck keeps moving



for

to

lfast













One man — the driver — of a Dempster Dumpster vehicle can service a large number of pre-loaded containers of infinite range and capacity.

The system comprises the Dumpster hydraulic equipment mounted on a suitable chassis and a range of purpose-made containers capable of handling all types of material in capacities from 2½-15 cu. yd, and up to 38,000 lb. Whilst being ideal for the large industrial organization, the system is as economically attractive to the contractor servicing a large number of smaller industries.

See what these new standards offer you by writing for full details, or alternatively, let us make an appointment for one of our engineers to call with our portable film unit showing the Dumpster in actual operation.

Engineering Co. Ltd.

Cambrian Works, Maindy, Cardiff. Telephone: Cardiff 29611. Telegrams: Peedeng, Cardiff London Office: 19 Berkeley St., W.I. Tel: HYDe Park 7010



CONTRACTS

COUNTY BOROUGH OF DONCASTER. PRIVATE STREET WORKS.

HIGHWAYS CONTRACT NO. 57.

HIGHWAYS CONTRACT NO. 57.

TENDERS are invited for the MAKING-UP of the FOLLOWING PRIVATE STREETS:

St. Augustine's Road; St. George's Road; Prince's Road; Bridge Road; The Oval; The Avenue; Moorland Grove (Part of).

The proposed works comprise the St. Sewer Gin. to 18 in. dia.; 2,700 lin. yd. of Kerb: 7,850 sq. yd. of Coated Macadam Surfacing to Carriageways (including the adjustment of existing pitched foundation); 3,750 sq. yd. of Flagging to Footbaths: together with Brick Manholes, Guilles, and ancillary works.

Manholes, Guilles, and ancillary works. Bills of Quantities may be obtained on payment of a deposit of £3 ss., returnable on receipt of a bona-fide Tender, from the Borough Engineer, 2 Priory Place, Doncaster, at whose Office Plans, Sections and Conditions of Contract may be inspected.

Tenders, sealed in an expected.

Tenders for Private Street Works," are to be received at the Office of the undersigned, at the address given below not later than 10 a.m. on FRIDAY, 25th August, 1961.

The Council does not bind itself to accept the lowest or any Tender.

H. R. WORMALD, Town Clerk.

H. R. WORMALD, Town Clerk.

1 Priory Place, Doncaster, 20th July, 1961. BOROUGH OF BEXLEY. DANSON PARK LAKE.

TENDERS are invited for the RAISING of the EARTHEN EMBANKMENT at DANSON PARK LAKE. Concrete Spillway Chamber, Wave Wall. Valve and Stilling Chambers, and all other works incidental thereto.

A copy of the Contract documents, which will be available for issue on 4th August. 1961, may be obtained from SERS. LEMON AND BLIZARD, 59 registers, which will be returned to the Bexley Corporation, which will be returned on receipt of a bona-fide Tender and the return of all documents.

BOAD RESURFACING WORKS.

TENDERS are invited for the SUPPLY, DELIVERY and LAYING of approximately 13.000 super, yd, of TWO-COURSE and SINGLE-COURSE BITUMINOUS MACADAM, to be used for the Surfacing of County and District Roads within the Borough.

Contractors wishing to Tender should apply to the Borough Engineer and Surveyor, Town Hall, Mossley, for Specification, Schedule and Form of Tender, enclosing a deposit of £2 2s., which will be returned on receipt of a bona-inde Tender.

Tenders to be forwarden to the undersigned in a part of the sealed by the sealed by the sealed by the sealed of the

ontract."
The Corporation does not bind itself to accept the west or any Tender.

V. C. PROCTER, Town Clerk.

38 Manchester Road, Mossley.

BOROUGH OF WIDNES.

PACE LANE HOUSING SITE—ROADS AND

PACE LANE HOUSING SITE—ROADS AND
SEWERS.

TENDERS are invited for the FOLLOWING WORK
within the Borough of Widnes:

The Construction of Roads and Sewers at Page
Lane Housing Site, consisting of approx.

BIID sq. yd. of 6in. Lean-Mix Concrete
Carriageway Surfaced with 2in. Tarmacadam,
268 lin. yd. Concrete Kerbing, 130 lin. yd.
of 9in. dia. Stoneware Sewers, together with
Manholes, and other ancillary works.
Plans and General Conditions Borough Engineer and
Surface and Continued Concrete Conditions
Page Lane Housing Site—Roads and Sewers," must
be delivered to the undersigned on later than First
Post on MONDAY, 21st August, 1961.

Town Hall.

Town Clerk.

Town Hall, Widnes. July, 1961

ROTHERHAM RURAL DISTRICT

FENCE SEWERAGE SCHEME.

TENDERS are invited, on a FIXED-PRICE BASIS, for the LAYING of 450vd of 9ln. CONCRETE PIPES, together with Manholes? RISING MAINS, comprising of the compression of the compression of the control of the compression of the control of the compression of the control of the contro

Drawings and inspected at the Council Offices during normal workshours.

Tenders, in plain sealed envelope endorsed "Tender—Fence Drainage," must be delivered to the undersigned not later than Noon on SATUNDAY, 2nd September, 196 and 196

CONTRACTS

COUNTY BOROUGH OF GT. YARMOUTH.

DEMOLITION AND REBUILDING OF THE JETTY AND SEA WATER PUMP HOUSE, GT. YARMOUTH

AND SEA WATER PUMP HOUSE, GT. YARMOUTH.

TENDERS are invited for the DEMOLITION of the JETTY and SEA WATER PUMP HOUSE, and their REBUILDING, Including Suspension of approx. 100 lin. yd. of 12in. dia. Cast-iron Delivery Main under the proposed Jetty: Alterations to the existing Cast-iron Pumping Mains, and anciliarry works. The Jetty Construction, using materials and methods they have available.

Specification, Bills of Quantities and Form of Tender may be obtained from the Borough Engineer, Town Hall, Great Yarmouth, Norfolk, on payment of a depolar of Edity Which will be returned on receipt and the season of the Jetty Construction with the proposed of the Jetty Construction of the Jetty Construction, using materials and methods they are also as a construction of Quantities and Form of Tenders, which will be returned on receipt a depolar of the Jetty Construction
FARRA CONWAY, Town Clerk. Town Hall, Great Yarmouth, 24th July, 1961.

COUNTY BOROUGH OF GT. YARMOUTH. RENEWAL OF SEA WATER PUMPING PLANT— THE JETTY GREAT YARMOUTH.

TENDERS are invited for the SUPPLY, DELIVERY and ERECTION of PUMPING PLANT for providing Sea Water to the Swimming Pool and Boating Lakes. The Contract includes for a Pump (capacity approx. 2,000 g.p.m. against a head of approx. 45ft., and lesser flows against greater heads), Electric Motor, Priming Equipment, Suction and Electrical Control Gear.

riming Equipment, action and crettries control articulars relating to the proposed plant may be brained from the Borough Engineer, Town Hall, reat Yarmouth, Norfolk, on payment of a deposit \$2 2s. which will be returned on receipt of a na-fide Tender.

Tenders, sealed in the envelope provided, must be much a control to the control of
reach me not later than more at 1961.
The Corporation does not bind itself to accept any The Converse to the C

FARRA CONWAY, Town Clerk.

Town Hall, Great Yarmouth, Cath July, 1961. BOROUGH

TENDERS Invited for CONSTRUCTION of TWO SURFACE WATER SEWERS and a FOUL SEWER, comprising following approx. quantities: 450 in. yd. 12in. and 9lin. Concrete Pipe: 300 lin. yd. 9lin. S.G.W. Pipe, with Inverted Siphon Spun-iron Pipe under railway, and appurtenant Manholes. Drawings and General Conditions of contract inspected 30 Offices of, and Tender documents obtained from. Borough Surveyor, Guildhall, Shrewsbury, on 50 bona-fide Tender.

Tenders to be returned to the undersigned, in envelope provided, not later than 10 a.m., MONDAY, 11th September, 1961.

S. R. H. LOXTON,

S. R. H. LOXTON,

BOROUGH OF BARKING. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

EAST STREET BATHS, BARKING.

TENDERS are invited for DISMANTLING and REMOVING FROM SITE TWO SPENCER-HOPWOOD ODERS.

Specifications and Form of Tender may be obtained from the Borough Engineer and Surveyor, Town Hall, Barking, and returned to The Worshipful the Mayor, Town Hall, Barking, Sessex, in the envelope provided, not later than 9 a.m., MONDAY, 4th September, 1961.

Town Hall, Barking.

BOROUGH OF BARKING. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

TENDERS are invited to SUPPLY, ERECT and PUT INTO SERVICE TWO THREE-PASS WET BACK HORIZONTAL PACKAGE BOILERS, complete with Fully Automatic Rotary Cup type Oil-firing Equipment and Oil Tank.

Specification and Form of Tender may be obtained from the Borough Engineer and Surveyor, Town Hall, Barking, and returned to The Worshipful the Mayor, Town Hall, Barking, Essex, in the envelope provided, not later than 9 a.m., MONDAY, 4th September, 1961.

E. R. FARR, Town Clerk.

BOROUGH OF BASINGSTOKE HOUNDMILLS INDUSTRIAL ESTATE—PHASE II.

HOUNDMILLS INDUSTRIAL ESTATE—PHASE II.

TENDERS are invited for the CONSTRUCTION of ROADS and SEWERS at the ABOVE SITE.

The work includes the Construction of approx. 5,000 sq. vd. of 8in. Lean-Mix Concrete Carriageway with Bituminous Macadam Surfacing, together with 1,100 lin. yd. of Precast Concrete Kerbing; the Laying of 500 lin. yd. of 6in. to 12in. dia. Surface Water Sewers and the Laying of 260 lin. yd. of 5. Specification, Bill of Quantities and Form of Tender may be obtained from the Borough Surveyor, Municipal Buildings. Basingstoke, Hants, on payment of a 5.2 st. deposit which will be refunded on receipt of a bona-fide Tender not subsequently withdrawn. Tenders must be delivered to the undersigned, in a plain sealed envelope endorsed "Tender for Houndmills Industrial Estate—Phase II." not later than Noon on FRIDAY, 1st September, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

R. J. PURVIS. Town Clerk.

Municipal Buildings, London Road, Basingstoke. 27th July, 1961.

CONTRACTS

BEDFORDSHIRE COUNTY COUNCIL LONDON-CARLISLE-GLASGOW-INVERNESS TRUNK ROAD, A.6.

IMPROVEMENT FROM LUTON BOROUGH BOUNDARY TO WARDEN HILL.

TENDERS are invited for the WIDENING of the ABOVE ROAD by approx. 8ft. for a distance of 1.500 in., yd.
The works involve the Excavation for, and Construction of, the Widened Portion of Road, the Provision of a New Footpath, and Alterations and Adjustments to G.P.O. Plant, Sewers, and Street

Tender documents may be obtained from the County Surveyor, Dents Road, Bedford, on payment of a deposit of two Pounds which will be retuned on receipt of a bona-fide Tender. Detailed drawings may be inspected by appointment. Sealed Tenders, in a plain envelope endorsed improvement of A.6 from Luton Borough Boundary to Warden Hill, must be delivered to the undersigned by 12 Noon on FRIDAY, 18th August, 1951.

The Council does not bind itself to accept the lowest or any Tender.

GEORGE BREWIS, Clerk of the County Council.

COUNTY BOROUGH OF OLDHAM HOUSING COMMITTEE.

LITTLEMOOR LANE REDEVELOPMENT.

LITTLEMOOR LANE REDEVELOPMENT.

The Housing Committee are prepared to receive FIXED-PRICE TENDERS for the ERECTION FOR FOLLOWING 74 PERMANENT TRADITION OF FOLLOWING 74 PERMANENT TRADITION OF FOLLOWING 74 PERMANENT TRADITION OF THE PROPERTY OF THE PROPERY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY

EDWARD HAINES.

BOROUGH OF STAFFORD. CAMBRIDGE STREET RELIEF SURFACE WATER SEWER.

TENDERS are invited for the CONSTRUCTION of approx. 900 lin. yd. of 9in.-24in. dia. STORM WATER SEWER in Flexible Jointed Concrete Pipework. complete with approx. 15 Manholes, and ancillary

complete with approx. 15 Manholes, and ancillary works.
Tender documents can be obtained from T. H. HIGSON, B.Sc., A.M.I.C.E., Borough Surveyor, Mount Completed Tenders should be returned to the undersigned by 10 a.m. on THURSDAY, 31st August, 1961.

(Signed) T. BROUGHTON NOWELL, Town Clerk.

Borough Hall, Stafford. CITY OF BIR MINGHAM.

HOUSING MANAGEMENT DEPARTMENT. SILICONE WATERPROOFING SOLUTIONS.

SILICONE WATERPROOFING SOLUTIONS.

The HOUSING MANAGEMENT COMMITTEE is giving consideration to the establishment of an appropriate of the stablishment of an appropriate of the stablishment of an appropriate of the stablishment of the considered for inclusion in the approved list should apply to the undersigned for a statement of the conditions applicable.

Acceptance on the approved list will be essential acceptance form either manufacturers or other suppliers can be considered.

P. MACEY, Housing Manager.

Bush House.

Bush House, Broad Street, Birmingham

WEST BRIDGFORD URBAN DISTRICT WORKS OF SEWERAGE AND SEWAGE DISPOSAL

WORKS OF SEWERAGE AND SEWAGE DISPOSAL TENDERS on a Fixed-price Basis are Invited for the CONSTRUCTION OF WORKS, comprising about 3,100 lin. vd. of Glazed Stoneware and Soun-iron Pipe Sewers of diameters ranging from 30in. to fin. (part of which may be laid in tunnel), with Manholet, about 5,200 lin. vd. of Spun-iron Rising Mains of diameters ranging from 10in. to 24in. (including a crossing under the River Trent), with Chambers and Water Tanks involving Reinforced Concrete Construction, together with incidental works, all in accordance with the Drawings, Specification and Bills of Quarticles propared by the Consulting Engineers, A. H. S. WATERS AND PARTNERS, of 25 Temple Row. SWATERS AND PARTNERS, of 25 Temple Row. Conditions of Contract, Specification, Bills of Quarticles and Form of Tender may be obtained from, the Offices of the undersigned or of the Consulting Engineers, on or after the 15th August, 1961. of payment of a deposit of Five Guineas which will be return of all documents. Form of Sender was the conditions of Contract to the Consulting at my Office not later than Noon on the 26th SEPTEMBER, 1961.

The Council do not undertake to accept the lowest or any Tender.

A. G. MANSFIELD, Clerk of the Council. Offices of the West Briddight U.D.C.

any Tender.

A. G. MANSFIELD.
Clerk of the Council.
Offices of the West Bridgford U.D.C.,
The Hall,
Bridgford Road,
West Bridgford,
Nottingham.
21st July, 1961.

1

CIL.

f the 1.500 Con-the and Street

dorsed undary signed

ot the

HAM.

receive of the ONAL in the from acts:—

ntities, lay be DDLE-ers, 21 der not crossed Didham railable

ed not

accept will be which ovision

ierk.

WATER

ON of

ncillary T. H. Mount

to the August,

ELL.

A M.

TEE is of an VATER-etc. to be should of the

essential r other

ager.

TRICT

POSAL.

ited for g about pun-iron to 6in. lanholes. Aains of luding a pers and d Storm constructordance of Quan-A. H. S. le Row.

General
of Quanrom, the
onsulting
961, on
will be
and the

in the vered to the 26th e lowest

ouncil.

T. S.

CONTRACTS

COUNTY BOROUGH OF DUDLEY. RUSSELLS HALL ESTATE PRIVATE DEVELOPMENT, OFF BUSHEY FIELDS ROAD AND ASHENHURST ROAD.

ROADS AND SEWERS.

Applications to TENDER are invited for the ABOVE CONTRACT, consisting of 620 lin, vd. 9in, dia. Pipes; 340 lin, vd. 27in, dia. Pipes; 650 lin, vd. 9recast Kerb and Channel: 2.05 sq. vd. of Pitched Carriageway, and another must be submitted to the Borough and another must be submitted to the Borough Engler, The Council House, Dudley, Worcs, together with a deposit of £2 2s. which will be returned on receipt of a bona-fide Tender not subsequently withdrawn, and the return of all documents. The latest date for receipt of a pand for the country with the council will be forwarded after this date.

P. D. WADSWORTH.

The Council House,

The Council House, Dudley, Worcs. July, 1961.

BOROUGH COUNCIL. DROITWICH DROITWICH SEWERAGE AND SEWAGE DISPOSAL. CONTRACT NO. 1.

CONTRACT NO. 1.

TENDERS are invited for the CONSTRUCTION of about 530 lin. yd. of GLAZED STONEWARE and SPIN-IRON PIPE SEWERS 9lin. in dia., with Manholes, about 1.050 lin. yd. of Spin-Iron Temporary Rising Mar additional Sedimentation Tank, an Earth-pank Sludge Lagoon, and incidental works, in accordance with the Drawings, Specification and Bills of Quantities prepared by the Engineers, A. H. S. WATERS AND PATNERS, of 25 Temple Row. Birmingham. Say we be seen at, and the General Conditions of Contract, Specification, Bills of Quantities and Form of Tender may be obtained from, the Offices of the undersigned, or of the Engineers, on or after the 14th August, 1961, on a payment of a deposit of the undersigned, or of the Engineers, on or after the 14th August, 1961, on a payment of a deposit of a bona-fide Tender and the return of all documents.

Sealed Tenders, on the form supplied and in the endorsed envelope provided, are to be delivered to me all my Office not later than Noon on the 8th SEPTEMBER OF SETER.

S. G. FOSTER. Town Clerk.

Town Hall, Droitwich, Worcs. 27th July, 1961.

BOROUGH OF WARWICK.

WATHEN ROAD WATERCOURSE-CULVERTING AND REGRADING.

WATHEN NUMBERS OF THE STATE OF

BOROUGH OF SCARBOROUGH. SOUTHERN OUTFALL SEWER RECONSTRUCTION. STAGE 2.

TENDERS are invited for the CONSTRUCTION of 389yd. of 81in. dia. and 18yd. of 48in. dia. THICK-ENED CONCRETE PIPE SEWER, to be laid in open cut along SANDSIDE. and incidental works thereto. APRIL. 1962.

APRIL. 1962.

Specifications, Bills of Quantities, Conditions of Contract and Form of Tender may be obtained on payment of a deposit of Two Guineas which will be refunded on receipt of a bona-fide Tender and the tundersigned.

The tundersigned in the tundersigned in the contract and Form of the undersigned in the undersigned. The tundersigned in the undersigned in the undersigned of Southern Cutfall Sewer Reconstruction, "must be received by the undersigned not later than 10 a.m. on FRIDAY, 1st September, 1961.

V. FORSHAW.

V. FORSHAW. Borough Engineer and Surveyor. Town Hall, Scarborough. August, 1961.

BOROUGH OF GOSPORT.

HIGHWAY IMPROVEMENT WORKS IN ROWNER LANE, WYCH LANE AND BREWERS LANE.

ROWNER LANE, WYCH LANE AND BREWERS LANE.

TENDERS are invited for the ABOVE WORKS, which include the Cutting Back of Hedges; the Regrading of Ditches and the Laying therein of approx. 370 lin. vd. of 12in. dia. Pipes; the Construction of Julies and 10 Manhole Chambers; the Laying Guilles and 10 Manhole Chambers; the Laying of Chambers; the Laying of Layi

must reach my Office not later than MONDO...
August, 1961.
The Council do not bind themselves to accept the lowest or any Tender.
EDWARD ADDENBROOKE.
Town Clerk.

CONTRACTS

TENDERS are invited for all or any of the FOLLOWING SCHEMES, which are subject to the Ministry of Transport's Standard Conditions of Transport's Standard Conditions of Contract and Stage II.

(1) Calidectote-Coventry-Oakley Wood Road.

Stage II.

Widening and Kerbing approximately 800vd. of 24ft. Carriageway, together with Asphait Base Course, and Call North Road, Cliffton-upon-Dunsmore.

(2) North Road, Cliffton-upon-Dunsmore.

Transport of the Stage II.

(3) North Road, Cliffton-upon-Dunsmore.

Widening Old Carriageway to 16ft. for approximately 560vd. of 18ft. Carriageway in Residential Road, together with Footpaths and other incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and incidental Works.

Widening Old Carriageway to 16ft. for approximately 12 miles, including Surfacing, Drainage and Care the County Surveyor duri

BOROUGH OF SLOUGH.

TRADING ESTATE LINK ROAD.

TRADING ESTATE LINK ROAD.

TENDERS are invited on a Fixed-price Basis for the CONSTRUCTION of a NEW ROAD linking the CONSTRUCTION of a NEW ROAD linking the Concrete Carriageway Foundation and Asphalt Surfacing, 1,500 sq. yd. of Footway Surfacing, 300 linking the Specifications, Bills of Quantities and Forms of Specifications. Bills of Quantities and Forms of Specifications, Bills of Specifications, B

DORKING URBAN DISTRICT COUNCIL.

ST. JOHN'S ROAD IMPROVEMENT AND BAILEY ROAD SURFACE WATER SEWER.

TENDERS are invited for the FOLLOWING

ORKS:—

(a) St. John's Road Improvement—100 lin. yd. of Widening, and ancillary Works.

(b) Balley Road Surface Water Sewer—240 lin. yd. of 12In. Concrete Pipes.

Separate Tenders are required for each of the above. Documents available from Engineer and Surveyor.

MONDAY. 4th September, 1961.

The Council do not undertake to accept the lowest or any Tender.

F. G. SUTHERLAND.

F. G. SUTHERLAND, Clerk of the Council.

Council Offices, Pippbrook, Dorking, Surrey, July, 1961.

LYDNEY RURAL DISTRICT COUNCIL.

WATER SUPPLY PARISH OF TIDENHAM.

WATER SUPPLY PARISH OF TIDENHAM.

TENDERS, on a FIXED-RATE BASIS, are invited for the LAYING of 4,844vd, of 4in, and 840vd, of 3in. SPUN-IRON WATER MAIN, including all necessary Valves and Fittings and anciliary Works, in the Parish Specification, Bills of Quantities and Form of Tender may be obtained from the Engineer and Surveyor, Council Offices, Lydney, on payment of a deposit of Five Guineas, which will be refunded on the receipt of a bona-fide Tender and the return of all documents supplied in connection with the Tender. The supplied in connection with the Tender. Surveyor, Council Offices, Lydney. Tenders, enclosed in the envelope supplied, must be delivered to the undersigned not later than Noon on THURSDAY, 31st August, 1961.

The Council of not bind themselves to accept the lowest or any Tender, and the acceptance of any of Housing and Local Government.

Dated this 28th day of July, 1961.

E. A. BEECH.

Council Offices,

Council Offices, Lydney, Glos.

SWALE RURAL DISTRICT COUNCIL. IMPROVEMENT TO TEYNHAM S.D. WORKS.

IMPROVEMENT TO TEYNHAM S.D. WORKS.

TENDERS are invited from experienced civil engineering contractors, for the WORKS DESCRIBED BELOW:

The work will comprise the Construction of a Pumping Station and an additional Stormwater Tank; the Modification of an existing Sedimentation Tank inet: Alterations to the existing Servening and Overfice of the Fifter Beds, and the Construction Stributors to the Fifter Beds, and the Construction Chamber: the Laying of 800yd. of 4in. dia. Asbestoscement Pipe Rising Main; together with Fencing, Drains, Pipework, and other ancillary work.

Apolication for documents should be made to H. D. HARGRAVES, M.I.Mun.E., M.R.S.H., the Engineer action of the Address below. The names of three Engineers are below. The names of three Engineers are below. The names of three Engineers in the envelope provided, should reach the undersigned not later than 10 a.m. on THURSDAY, the 14th September, 1961.

The Council does not bind liself to accept the lowest or any Tender.

BRYAN TASSELL, Clerk of the Council.

CONTRACTS

WARWICKSHIRE COUNTY COUNCIL. BOROUGH OF WREXHAM.

FIXED-PRICE TENDERS are invited for the FOLLOWING:
No. 1 Sorras Park Road: 289 lin. yd. 9in.
Sorras Park Road: 289 lin. yd. 9in.
Sorras Park Road: 289 lin. yd. 9in.
Sorras Park Road: 289 lin. yd. 9in.
Sorras Park Road: 289 lin. yd. 9in.
Sorras Park Road: 280 lin. yd. 9in.
Sorras Park Road: 1 Sorras Park Road: 28 lingsmills Road Improvement (White-gate Road to C. T. Clarke's).
(b) Croesnewydd Road Footpath (North Side).
Victoria Hall).
Drawings and General Conditions of Contract may be inspected, and Specifications, Billis of Quantities and Forms of Tender obtained from J. M. DAVIES, Borough Engineer and Surveyor. Guildhall, 4 Procham Borough Engineer and Surveyor. Guildhall, 4 Procham Contract, which will be refunded on receipt of a bona-fide Tender.
Tenders, in the envelope provided, must be sealed and delivered to the undersigned by 12 Noon on MONDAY, 21st August, 1961.
The Contract of the Contract of the University of the Contract of the University
PHILIP J. WALTERS, Town Clerk.

Guildhall, Wrexham, July, 1961.

BOROUGH OF EDMONTON.

RESURFACING OF SILVER STREET (A.406)

GLOUCESTER ROAD TO SWEET BRIAR WALK. TENDERS are invited for the BURNING OFF of 12 in. of EXISTING SURFACING and RESURFACING with 12 in. of THICK HOT-ROLLED ASPHALT WEARING COURSE (approximate area 3,000 sq. yd.), together with the Reconstruction of a Pedestrian

WEARING with the Reconstruction of a recession.

Crossing.

Applications for Contract documents, accompanied by a deposit of \$2.2\$ which will be refunded only of the contract
H. BACKHOUSE,

CITY OF WINCHESTER.

The CORPORATION Invite TENDERS for the CONSTRUCTION of approx. 680yd. of 6in. and 9in. FOUL SEWER in DEAN LANE, Winchester (C.466), and all incidental works and Form of Tender may be obtained from the City Engineer. Guildhall, be obtained from the City Engineer. Guildhall, will be refunded on receipt of a boar-fide Tender and the return of all documents. Drawlings and General Conditions of Contract may be inspected in the City Engineer's Department.

Tenders, in plain sealed envelopes endorsed "Dean Lane Sewer," should reach the undersigned not later than First Post on FRIDAY, 1st September, 1961.

R. H. McCALL. Town Clerk.

Gulidhall, Winchester. 3th August, 1961. CITY OF CAMBRIDGE.

PIPING OF PUBLIC DITCHES.

PIPING OF PUBLIC DITCHES.

TENDERS are invited for the PIPING of DITCHES on TMREE SEPARATE SITES, less than one mile apart. Words of the public state of the public st

1961.
Applications must be accompanied by a deposit of Two Guineas, which will be returned on receipt of a bona-fide Tender.
The lowest or any Tender will not necessarily be accepted. ALAN H. I. SWIFT. Town Clerk.

The Guildhall, Cambridge, July, 1961.

NESTON URBAN DISTRICT COUNCIL. PRIVATE STREET WORKS.

PRIVATE STREET WORKS.

FIXED-PRICE TENDERS are invited for the MAKING-UP of TALBOT CLOSE, Little Neston, under the MAKING-UP of TALBOT CLOSE, Little Neston, under the Making-UP and the Making-UP and the Making-UP and the Making-UP and Surveyor, Town Hall, Neston, Wirral, on application in writing.

Tenders, in plain sealed envelopes endorsed "Making-up Talbot Close," accompanied by the compensation of the Making-UP and the

Town Hall, Neston, Wirral. August, 1961.

BOLLINGTON URBAN DISTRICT

OAK LANE SEWERAGE.

OAK LANE SEWERAGE.

TENDERS are invited for the LAYING of about 675 lin. yd. of 6in. diameter CONCRETE PIPE SEWER and CONSTRUCTION of EIGHT CONCRETE MANHOLES.

Tender documents may be obtained from, and Plans inspected at, the office of the Engineer and Surveyor, of a deposit of £2 2s., returnable on receipt of a bona-fide Tender.

Sealed Tenders, endorsed "Oak Lane Sewerage," are be delivered to the undersigned not later: than FRIDAY, the 1st September, 1961.

A. E. F. DEAR,

Council Offices,

Council Offices, Bollington, Near Macclesfield.

SUPPLEMENT

BOROUGH OF ENFIELD. 12 THREE-STOREY FLATS, 22 HOUSES AND 34 GARAGES.

FERNS NURSERY ESTATE.

Building contractors desirous of tendering for the ERECTION of 12 THREE-STOREY FLATS, 22 HOUSES and 34 GARAGES at the FERNS NURSERY ESTATE, Enfield, should apply to the Borough Engineer and Surveyor, MR. H. DERYCK PEAKE, M.Sc.(Eng.), M.I.C.E., 7 Little Park Gardens, Enfield, by First Post, Tuesday, 22nd August, 1961. Bills of Quantities and Forms of Tender will be forwarded on or about the 25th August, 1961. Bills of Quantities and Forms of Tender will be forwarded on or about the 25th August, 1961. All applications returned on receipt of a bona-field for addressed to the undersigned, and/or return of all documents.

Plans and Conditions of Contract may be inspected at the offices of the Borough Engineer as aforesaid on or after the 28th August, 1961, on Mondays to Fridays, between the hours of 9 a.m. on Mondays to Triders MONDAY, the 18th Sentember, 1961, and no Tender will be received except in a plain envelope, which must be sealed, and must bear the words "Tender for 12 Flats, 22 Houses and 34 Garages—Ferns Nursery Estate, Enfield," but shall not bear any name or mark indicating the sender.

The Council do not bind themselves to accept the particulars of similar works which have been carried out by them.

CYRIL E. C. R. PLATTEN,

CYRIL E. C. R. PLATTEN,

BOROUGH OF MAIDENHEAD.

GARAGE FORECOURTS-

The Council Invites TENDERS for the CONSTRUCTION of GARAGE FORECOLITS, comprising Excavation, Hardcore FORECOLITS, comprising Excavation, Hardcore FORECOLITS, comprising Excavation, Hardcore FORECOLITS, comprising Excavation, Hardcore Forecolity of the Construction of Marcadam Basecourse and Bituminous Macadam Waering Course (approximately 700 sq. yd.), Provision and Laying of Kerbs and Channels, Surface Water Drainage, Construction of Dwarf Brick Wall, together with all incidental Works. Tender documents Drawings may be fine of the Borough Engineer and Surveyor, 14 Craufurd Rise, Maldenhead, on payment of a deposit of Two Pounds (£2), which will be refunded upon receipt of a bona-fide Tender and the return of all documents of the Surveyor, 18 Craufurd Rise, Maldenhead, on payment of a deposit of Two Pounds (£2), which will be refunded upon receipt of a bona-fide Tender and the return of all documents of the sender, must be delivered to may not later than MONDAY, the 28th August, 1961.

to me not later than MONDAT, but 1961.

1961.
The Council does not bind itself to accept the lowest or any other Tender.

STANLEY PLATT, Town Clerk.

CITY

Guildhall,
Maidenhead,
Maidenhead,
Berkshire.
Berkshire.
OF MANCHESTER.

Supply of ELECTRIC TENDERS are invited for the SUPPLY of ELECTRIC LAMPS during the period 1st November, 1961, to 31st December, 1962.

Tender Forms, returnable by the 24th AUGUST, 1961, from the CITY SURVEYOR, Town Hall, Manchester, 2.

OF MANCHESTER.

TENDERS are invited for HEIGHTENING a CONCRETE MANHOLE in CLAYTON VALE. Tender Forms, to be returned by the 28th AUGUST, 1961, obtainable from the CITY SURVEYOR, Town Hall, Manchester, 2.

CHESHIRE RIVER BOARD. RIVERS BIRKET AND FENDER IMPROVEMENT SCHEME, WIRRAL, CHESHIRE.

SCHEME, WIRRAL, CHESHIRE.

TEMDERS are invited for the EXECUTION of the FOLLOWING WORKS un the MORETON-GREASBY SECTION of the SCHEME:

Widening of Existing Reinforced Concrete Flume and Replacement of Accommodation Bridge at Moreton, Wallasev.

Suspended Sewer Crossing at Saughali Massie, Birkenhead.

Reinforcete Box Culvert and Flume at Union, Birkenhead.

Applications for Form of Tender and Contract documents should be addressed to the Engineer to the Board, 54 Hough Green, Chester, and should be accompanied by a deposit of Three Guineas, returnable after the receipt of a bona-fide Tender not subsequently withdrawn, and when notification of the Board's decision is made to the tenderer. Tender—Birket and Fender Scheme—Moreton-Greasby Section," must be returned to the undersigned not later than 12 Noon on THURSDAY, 7th September, 1961.

Drawings may be inspected at the offices of the Engineer to the Board.

Cierk's Office.

HUGH CARSWELL,

Cierk to the Board.

Clerk's Office, County Hall, Chester, 1st August, 1961.

POOLE AND EAST DORSET WATER BOARD.

WATER MAINS—BLANDFORD BRIDGE TO CHARLTON MARSHALL AND CHARLTON TO THORNCOMBE.

TENDERS. on a FIXED-PRICE BASIS, are invited from competent civil engineering contractors for EXCAVATING, BACKFILLING and LAYING approximately 2,900 lin. vd. 6in. 1,050 lin. vd. 4lin. and Values of the contractor of the contract

Orset.

Direct.

Dire

4 Commercial Road, Parkstone, Poole, Dorset,

CONTRACTS

BOROUGH OF HARROW.

TENDERS are invited for the DEMOLITION of UNDERGROUND AIR - RAID SHELTERS and REINSTATEMENT of the OPEN SPACE at CHURCH FIELDS, Harrow-on-the-Hill. (Explosives not per-

FIELDS. Marrow-on-the-Hill. (Explosives not permitted.)
Drawings and Conditions of Contract may be inspected at the office of, and a copy of the Form of Tender, Specification and Bills of Cantities obtained council offices, Usbridge Roads and pineer. An apart of Two Pounds, by crossed cheque made payable to the Harrow Borough Council, returnable where a bona-fide Tender reaches the Council within the prescribed time.

Tenders, on prescribedaction of the sender endorsed in a plain Tender. Demolition of Underground Al-raid Sheiters," to be delivered to the office of the undersigned not later than 10 a.m. on TUESDAY, 29th August, 1961.

The Council do not bind themselves to accept the

to the state of th DAVID PRITCHARD, Town Clerk.

Town Line Harrow Wea Harrow Middlesex. Clerk's Office, row Weald Lodge, farrow Weald,

CITY SALFORD. OF

SUPPLY OF FENCING AND GATES.

TENDERS are invited for the SUPPLY and DELIVERY of WROUGHT-IRON FENCING and GATES for:
(a) BOLTON ROAD PLAYING FIELDS, and (b) CLOWES PARK, in accordance with particulars to be obtained from the Director of Parks, Buile Hill Park, Tenders, in sealed envelopes addressed to the CHAIRMAN, Parks, etc., Committee, Town Hall, Salford, 3, and endorsed "Fencing and Gates—Bolton Road Playing Fields," or "Fencing and Gates—Clowes Road Playing Fields," or "Fencing and Gates—Clowes to the property of the Power of the Committee of the Parks of t

PENGE URBAN DISTRICT COUNCIL.

TENDERS are invited from registered demolition contractors for the DEMOLITION of SEVEN HOUSES in WOODBINE GROVE. Contract documents may be obtained from the office of the Engineer and Surveyor at the Town Hall, on payment of a deposit of £2, returnable on receipt of a bona-fide Tender, which is on the 23rd AUGUST, 1961, in a plain scaled envelope endorsed "Demolition—Groves Area (£.4)."

PERCY J. BUNTING, Clerk of the Council.

Town Hall, Anerley Road, S.E.20.

PRESCOT URBAN DISTRICT COUNCIL. INSTALLATION OF 80-WATT MERCURY FLUORESCENT STREET LIGHTING.

The Council invite TENDERS for the SUPPLY and ERECTION of 54 A.E.I., SL.3772 KIRBY LANTERNS, mounted on 15tt. Concrete Utilities Columns, together with Lamps and ancillary Gear, on VARIOUS ROADS within the District. Which is the State of Contract and the Conditions of Contract and Drawings inspected at, the office of the Engineer and Surveyor at the address below. Tenders, in plain scaled envelopes endorsed "Tender for Street Lighting," are to be delivered to the underfor Street Lighting," are to be delivered to the underfor Street Lighting," are to be delivered to the underfor Street Lighting," are to be delivered to the underfor Street Lighting," are to be delivered to the underfor Street Lighting," are to be delivered to the underfor Street Lighting, are to be delivered to the underformation of the contract of the street of the

e Council do not bind themselves to accept the st or any Tender.

F. LAMBERT, Clerk of the Council. Council Offices, Prescot. July, 1961

WOKING URBAN DISTRICT COUNCIL. HIGHWAYS ACT, 1959.

MAKING-UP OF THORNASH ROAD AND THORNASH CLOSE, HORSELL

TENDERS invited for the ABOVE CONTRACT, comprising approx. 250 lin. vd. Kerbing, 1,500 sq. vd. Footbath Works, and Repairs to existing Concrete Carriageway. Tender documents from Engineer and Surveyor on receipt of Two Guineas deposit, refundable only on drawn. bona-fide Tender not subsequently with-drawn. Drawings seen normal office hours at Engineer's Office.

Off Office.
Tenders to CLERK OF THE COUNCIL by 8.45 a.m.,
MONDAY, 28th August, 1961.

HATFIELD RURAL DISTRICT COUNCIL. SURFACING DELLSOME LANE ESTATE.

FIXED-PRICE TENDERS are invited for the CON-STATE OF THE PRICE OF THE

and GRASSED AREAS, together with other anchiary Works.

Specification, Bills of Quantities and Form of Tender can be obtained on payment of £2 25, deposit, returnable after receipt of a bona-fide Tender, from the Engineer and Surveyor, North Place, £2 Great North Road, Hatheld, where Drawings and documents may be inspected during working hours.

Tenders to be submitted in the envelope provided, to the undersigned, not later than 12 Noon on FRIDAY, 8th September, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

S. F. JAGO.

S. F. JAGO, Clerk of the Council.

Council Offices, 16 St. Albans Road, Hatfield, Herts. 1st August, 1961.

MANCHESTER CORPORATION

HAWESWATER AQUEDUCT—LUNESDALE AND GREENBANK SIPHONS—CONTRACT NDP/3.

TENDERS are invited for the MANUFACTURE. SUPPLY and DELIVERY and SITE WELDING of approximately 4.845 lin. yd. of 49in. o/diameter class C and 201 lin. yd. of 49in. o/diameter class D STEEL WATER PIPES. SPECIALS, etc., with Sieve-welded Joints, Lined and Sheathed with Bitumen. Schedule and Conditions to the SECRETARY, Waterworks Offices, John State Manchester, 2.

CONTRACTS

NEW SOUTH WALES, AUSTRALIA

DEPARTMENT OF MAIN ROADS. MUNICIPALITY OF ROCKDALE AND SHIRE OF

SOUTHERN EXPRESSWAY.

PROPOSED BRIDGE OVER THE GEORGE'S RIVER, BETWEEN SANS SOUCI AND TAREN POINT.

BETWEEN SANS SOUCI AND TAREN POINT.

TENDERS, suitably endorsed and addressed to the Secretary. Department of Main Roads, Box 3903, and the secretary of the se

Roads, 309 Casterbase, Roads, Sec. 57 Strand, London, General for New South Wales, 56-57 Strand, London, W.C.2.

Copies of the Specifications may be purchased from the Department of Main Roads, Sydney, or from the Agent General for New South Wales, London, W.C.2, Formal of the Strand Sects of half-size of half-size of half-size of the Strand Sects of half-size
BOROUGH OF ROWLEY REGIS. PORTERS FIELD INDUSTRIAL ESTATE, CRADLEY HEATH.

TENDERS are invited for the CONSTRUCTION at the ABOVE ESTATE of 4,400 so, yd, of CARRIAGE-WAY, including Surfacing, and of 900 lin. yd, of 9in. to 18in. diameter SEWERS, and all incidental Works. Form of Tender, Specification. Bills of Quantities may be obtained from, and Conditions of Contract and Plans inspected at, the office of the Boroush Engineer and Surveyor, S. G. WOOD, M.I.Mun.E., Municipal Buildings, Old Hill, Staffs. on payment ceceipt of a bona-fied Tender not afterwards with Tenders must be delivered in the contraction of the

drawn.
Tenders must be delivered in the envelope provided.
Tenders must be delivered in the envelope provided to reach the undersigned not later than Noon on MONDAY, the 28th August, 1961.
G. C. COOKSON,
Town Clerk.

Municipal Buildings, Old Hill, Staffs.

BOROUGH OF FLINT. SUPPLY AND DELIVERY OF REFUSE COLLECTION VEHICLE.

TENDERS are invited for the SUPPLY and DELIVERY of a KARRIER BANTAM DUAL TIP REFUSE COLLECTION VEHICLE.

Specification and Form of Tender may be obtained from the Public Health Inspector, Municipal Offices, Earl Street, Flint.

Tenders must be delivered to the undersigned by the 28th AUGUST, 1961, in a plain sealed envelope endorsed "Fender—Refuse Collector." The Council do not bind themselves to accept the lowest or any Tender. WILLIAM McINTYRE.

WILLIAM MCINTYRE, Town Clerk.

DERWENT RURAL DISTRICT COUNCIL ESCRICK SEWERAGE AND SEWAGE DISPOSAL

TENDERS are invited, on a FIXED-PRICE BASIS, for the PROVISION and LAYING of approximately 1960 lin, vd. of 12in. 9in. and 6in. SEWERS, the BUILDING of TWO PUMPING STATIONS. the LAYING of approximately 1,130 lin, vd. of 4in. and 5in. PUMPING MAIN, and CONSTRUCTION of a SEWAGE DISPOSAL WORKS, at ESCRICK, near York. Drawings may be seen at the offices of the Countil's Consulting Engineers, MESSRS, FAIRBANK AND SON. M. Inst. C.E., 29 St. Mary's, York, during normal working hours.

Drawings may be seen at the omces of the Council's Consulting Engineers, MESSRS. FAIRBANK AND SON. M.Inst.C.E., 29 St. Mary's, York, during normal working hours.

Copies of the Specification, Form of Tender, Bill of Quantities, etc., may be obtained from the Engineers on deposit of Three Guineas, by cheaue payable to the Derwent Rural District Council. This sum will be returnable to the order of the stipulated date and shall not have withdrawn the stipulated date and shall not have withdrawn the Provided No. 10 of the Stipulated Council
same.

Tenders, in plain sealed envelope endorsed "Tender, Escrick S. and S.D.," must reach the undersigned on before 12 Noon on the 4th SEPTEMBER, 1961. The Council do not bind themselves to accept the lowest or any Tender, and their acceptance of a Tender is conditional upon the approval of the Ministro of Housing and Local Government.

G. DUNN, Clerk of the Council.

Council Offices, 1 Marlborough Grove, Fishergate, York. DEVON WATER BOARD. EAST COLYTON HILL SCHEME.

COLYFORD BOOSTER STATION.

TENDERS are invited from pump manufacturers for the SUPPLY of DUPLICATE ELECTRICALLY ABOVE STATION.

The pumps will be operated automatically, and will be required to pump 1,200 gallons per hour against a total head of 441ft.

Full details of the Contract, including the Specificon, Drawings and Conditions of Contract, may be obtained from the Chief Engineer to the Board at the undermentioned address, and the completed documents must be returned to the Clerk of the Board not late than First Post on the morning of MONDAY, 28th August, 1961.

The documents must be sealed in the envelope

than First Post on the morning.

August, 1961.

The documents must be sealed in the envelope provided, which must bear no indication of the person tendering, and the Board do not bind themselves to accept the lowest or any Tender.

D. G. BRUCE,
Clerk of the Board.

46 New Street, Honiton, Devon.

CONTRACTS

BOROUGH OF ELLESMERE PORT. CONTRACT NO. 316.

PROPOSED MINOR ALTERATIONS AND ADDITIONS,
MUNICIPAL OFFICES, WHITBY HALL,
ELLESMERE PORT.

TENDERS are invited for the PROPOSED MINOR ALTERATIONS and ADDITIONS, MUNICIPAL OFFICES. Whitby Hall, Ellesmere Port. Contract documents are obtainable from the Borough Engineer and Surveyor, Queen Street, Ellesmied Tenders, in the plain official envelope provided, must reach mis by post by not later than 5 p.m. of MONDAY. the 11th September, 1961.

The Council do not blind themselves to accept the lowest or any Tender.

R. J. BERNIE, Town Clerk.

Municipal Offices.

OF GLOSSOP. BOROUGH SEWER-LOWER DINTING.

TENDERS are invited for the SUPPLY and LAYING of about 100 lin. yd. of SEWER in GLAZED STONE-WARE and CAST-IRON PIPE, the CONSTRUCTION OF THREE MANHOLES, the INSTALLATION of ONE HATCH DOX, and all ancillary Works.

Specification, Bills of Quantities and Form of Tender may be obtained from, and Plans inspected at the Borough Surveyor's Office, Municipal Buildings.

Glossop.
Sealed Tenders, endorsed "Tender for Sewer—Lower
Dinting," must be returned to the undersigned not later than First Post, THURSDAY, 31st August.

I. A. PUGH. Town Clerk.

SI

k.

I T. TION

and

ained fices. y the rt the

erk.

VCIL.

SAL.

BASIS.
mately
is, the
is, the
n, and
of a
r York.
ouncil's
D SON,
normal

Bill of gineers able to tractor, nder by awn the Tender. ned on 1961. ept the e of a Ministry

ouncil.

OARD.

rers for

and will against

pecifica-may be d at the cuments not later Y, 28th

Board

Borough Surveyor's Office,
Glossop.
August, 1961.

O R O U G H O F B A T L E Y. BOROUGH PRIVATE STREET IMPROVEMENTS.

PRIVATE STREET IMPROVEMENTS.

TENDERS are invited for the CONSTRUCTION of CLIFTON ROAD (67 lin. vd. approx.) and LAITHE CROFT ROAD (167 lin. vd. approx.) in accordance with the Plans, Specification and Bills of Quantities prepared by the Borough Engineer.

The work includes Excuasting, Sewering, Levelling, Paving, Tarmacadam Surfacing, Flaggling, Kerbing, etc., and Medical of the Specification and Bills of Quantities may he obtained on application to the Borough Engineer, Hanover Street, Batley.

Tenders, in a plain sealed envelope (not bearing any name or mark indicating the sender), endodred Private Street Improvements, must be delivered to the undersigned by First Post on MONDAY, 4th September, 1961.

The Corporation does not bind itself to accept the lowest or any Tender.

BRIERLEY HILL URBAN DISTRICT

CIVIC BUILDINGS-PHASE THREE.

TENDERS are invited for the INSTALLATION of ELECTRICAL SERVICES to the ABOVE BUILDING ELECTRICAL SERVICES to the ABOVE BUILDING naw in course of erection. The work will be carried out as a Sub-contract under the terms of the General Contract based on the council of tendering are asked to submit their names, together with details of similar installations carried out by them, to the Council's Architect and Housing Director, I. R. MOORE, A.R.I.B.A., Civic Buildings, Brierley thill, not later than SATURDAY, 19th August, 1961. The lowest or any Tender will not necessarily be accepted.

HERBERT HEX. Clerk of the Council.

BRIERLEY HILL URBAN DISTRICT BROMLEY LANE IMPROVEMENT.

BROMLEY LANE IMPROVEMENT.

The Council invite TENDERS for the ABOVE WORK, comprising approx. 2,740 lin. vd. of Concrete Kerbing, 4,500 lin. vd. of Concrete Kerbing, 4,500 lin. vd. of Concrete Edging, and 12,000 sq. vd. of Machine-laid Two Course Hot Rolled Asphalt, to the Control of Machine-laid Two Course Hot Rolled Asphalt, to the Control of Machine-laid Two Course Hot Rolled Asphalt, to the Control of Machine-laid Two Course Hot Rolled Asphalt, to the Council of Machine-laid Two Course Hot Rolled Asphalt, where the Specification, chird council of the Engineer and Surveyor, Civic Buildings, Brierley Hill, where the Specification, chird department of Tender may be obtained upon payment of a deposit of Three Guineas which will be refunded as the submission of a bonation of the Council Course the Council Civic Buildings, Brierley Hill, so as to the Council Civic Buildings, Brierley Hill, so as to the Council Civic Buildings, Brierley Hill, so as to the Council Civic Buildings, Brierley Hill, so as to the Council Son August, 1961.

HERBERT HEX.

Clerk of the Council.

HERBERT HEX, Clerk of the Council.

BRIERLEY HILL URBAN DISTRICT COUNCIL.

KINGSWINFORD SCHEME 4—FINAL SURFACING, LAYOUT OF VERGES, ETC., AND KETLEY ROAD IMPROVEMENT.

The Council invite TENDERS for the ABOVE WORK, Comprising approx. 3,000 cu. vd. Excavation, 2,000 lin, vd. Kerning, 7,300 sq. vd. Carriageway Surface, 5,100 sq. vd. Carriageway Surface, 5,100 sq. vd. 6,000 lin, vd. 9ln. vd. 9ln. vd. Surface Water Section, 4,500 sq. vd. of Solling, 80 lin, vd. 9ln. vd. Surface Water Section Value
And 9. vd. Road Construction, and other incidental works.

Drawings and Conditions of Contract may be imported at the Office of the Engineer and Surveyor, Civic Buildings, Brierley Hill, where the Specification, Civic Buildings, Brierley Hill, where the Specification, Civic Buildings, Brierley Hill, where the Specification will be obtained upon payment of a deposit of Three Guineas will be refunded on the submission of a bonamisch will be refunded on the submission of a bonamisch will be refunded on the submission of a bonamisch will be refunded on the Submission of a bonamisch will be refunded on the Submission of a bonamisch will be refunded on the Submission of a bonamisch will be refunded in plain sealed envelope endorsed "Kingsmisord-Scheme 4—Final Surfacing," are to be returned to the Clerk of the Council, Civic Buildings, Briefley Hill, so as to be received not later than 110 took Noon on WEDNESDAY, 30th August, 1961.

10 Took Noon on WEDNESDAY, 30th August, 1961.

West or any Tender.

HERBERT HEX.

HERBERT HEX, Clerk of the Council.

CONTRACTS

COUNTY COUNCIL OF MIDDLESEX. WESTERN AVENUE, EALING-JUNCTION WITH HANGER LANE.

TENDERS are invited for the PERIODICAL CLEANING of the UNDERPASS at the ABOVE UNICTION for the period September, 1961, to 31st March, 1962.
Contract documents can be obtained from the County Engineer, Middlesse House, 20 Vauxhall Bridge Road, Westminster, S.W.1.
Tenders are to be delivered to the undersigned in Sealed envelopes (to be supplied) by not later than Noon on TUESDAY, 22nd August, 1961.

K. GODDACEE

K. GOODACRE, Clerk of the County Council.

COUNTY BOROUGH OF WALSALL.

EDUCATION COMMITTEE.

TEACHERS' TRAINING COLLEGE.

TEACHERS' TRAINING COLLEGE.

The Walsali County Borough Education Committee will invite TENDERS in October, 1961, for the FROMERS IN October, 1961, for the FROMERS IN October, 1961, for the FROMERS IN OCTOBERS
BOROUGH OF KIDDERMINSTER. OLD CATTLE MARKET, NEW ROAD—DISMANTLING AND DISPOSAL OF STEEL-FRAMED ROOFING AND GENERAL SITE CLEARANCE.

TENDERS are invited for the DISMANTLING and DISPOSAL of the STEEL-FRAMED ROOFING and GENERAL SITE CLEARANCE at the OLD CATTLE MARKET, NEW ROAD, Kidderminster. Copies of Forms of Tender, Conditions of Contract and Specification may be obtained from the Borough Tenders must reach the undersigned, in the envelope provided, by not later than Noon on THURSDAY. 31st August, 1961.

The Council does not bind itself to accept the lowest of any Tender.

JOHN L. EVANS.

JOHN L. EVANS, Town Clerk.

Town Hall, Kidderminster. 1961.

BOROUGH OF REIGATE.

GATTON PARK ROAD, A.242. ROAD IMPROVEMENT—CARLTON ROAD TO WRAY LANE.

TENDERS invited for RE-SHAPING 1.560 super. yd. of CARRIAGEWAY, LAYING 234 lin. yd. of KERE, and ancillary Works.

AND CONTROL OF THE CONTROL OF T

the undersigned by Noon, SALVANA 1986 to accept the lowest or any Tender.

HEBER DAVIES, Town Clerk. HEBER DAVIES. Town Clerk.

Town Hall, Reigate. 10th August, 1961.

BOROUGH OF SUTTON AND CHEAM. PROPOSED 16 FLATS AND EIGHT FLATLETS FOR AGED PERSONS.

ST. NICHOLAS RECTORY SITE, SUTTON.

ST. NICHOLAS RECTORY SITE, SUTTON.

The Council invites TENDERS, on a FIRM-PRICE BASIS, for the FRECTION of the ABOVE-MENTIONED LIVING UNITS in THREE BLOCKS of TWO-STOREY CONSTRUCTION.

Bill of Quantities and Form of Tender may be a considered to application to MS. Tuct. E. ONEDHAM. MICHOLAGO AND CONTROL OF THE CONTROL

A. PRIESTLEY, Town Clerk.

Municipal Offices, Sutton. July, 1961.

THE URBAN DISTRICT COUNCIL OF ABERDARE.

HOUSING REPAIRS-BATHS.

TENDERS are invited for REPLACING 100 BATHS in the COUNCIL'S HOUSES.
Specifications and Forms of Tender may be obtained from the Engineer and Surveyor's Department, Vestry Hall, Aberdare.
Tenders, in plain sealed envelopes bearing no mark or indication of the sender, but endorsed "Repairs—Baths," must reach ma on or before FRIDAY, 25th August, 1961.

D. G. JAMES, Clerk of the Council. (1394.)

Town Hall, Aberdare. 2nd August, 1961.

CONTRACTS

BOROUGH OF HARROW. DENSE TAR SURFACING-CAR PARK.

DENSE TAR SURFACING—CAR PARK.

TENDERS are invited for PROVIDING and LAYING DENSE TAR BASE and WEARING COURSES to a CAR PARK.

A Result of the Council of th

DAVID PRITCHARD, Town Clerk.

Council Offices, Harrow Weald Lodge, 92 Uxbridge Road, Harrow Weald, Middx.

BOROUGH OF HARROW. IMPROVEMENT TO BRIDGE APPROACHES— PHASE II—CUCKOO HILL, PINNER.

PHASE II—CUCKOO HILL, PINNER.

TENDERS are invited for RAISING the LEVELS on the BRIDGE APPROACHES in Lean-Mix Concrete and Surfacing of approx. 3,000 sq. yd. of Carriageway, together with approx. 300 lin, yd. of Surface Water Seeding of the Proposition of approx. 400 sq. yd. of New Construction of approx. 400 sq. yd. of New Construction and Illiary works.

Drawings and Construction and Illiary works. The construction of Tender, Specification and Illiary of the Form of Tender, Specification and Illiary of Quantities obtained on application to, the Borough Engineer, at the Council Offices, all Uxbridge Road, Stammore, Middlesex, on payment of Two Pounds by crossed cheque made payable to Harrow Corporation, returnable to the prescribed forms, enclosed in a plain envelope bearing no indication of the sender, and endorsed "Tender-Reconstruction of Approaches to Cuckoo Hill Railway Bridge," to bis delivered to my Office not later than 10 am. on TUESDAY, 29th August, 1951.

The Council do not bind themselves to accept the Town Clerk.

DAVID PRITCHARD, Town Clerk.

Council Offices, Harrow Weald Lodge, 92 Uxbridge Road, Harrow, Middx.

BOROUGH OF HARROW. RESURFACING-TAUNTON WAY.

RESURFACING—TAUNTON WAY.

TENDERS are invited for RE-LAYING approx.

1,000 lin. vd. of GRANITE KERB, PARTIAL RE-CONSTRUCTION of CARRIAGEWAY FOUNDATION, the STRIPPING of EXISTING SURFACING and RE-SURFACING with HOT ROLLED ASPHALT of approx.

5,450 sq. vd. of CARRIAGEWAY, and ancillary works.

Drawlings and Conditions of Contract may be inspected at the Office of, and a copy of the Form on application to. the Boundard of the Form on application to. the Boundard of the Form on application to. the Boundard of the Form on application to. The Stripping of the Form on application to the Boundard of the Form on application to the Boundard of Two Pounds by crossed cheque made payable to the Harrow Corporation, returnable where a bona-fide Tender reaches ma within the prescribed time.

Tenders, on prescribed forms, enclosed in a plain envelope bearing no indication of the sender, and envelope bearing no indication of the sender, and envelope bearing no indication of the sender, and the proposed Tender—Repairing and Resurfacing Taunton Way and no TUESDAY. 29th August, 1961.

The Council do not bind themselves to accept the lowest or any Clerk

DAVID PRITCHARD, Town Clerk.

Harrow Weald Lodge, 92 Uxbridge Road, Harrow Weald, Middx.

ROROUGH OF HARROW. RESURFACING WHITCHURCH LANE (BUCKINGHAM ROAD TO MONTGOMERY ROAD).

(BUCKINGHAM ROAD TO MONTGOMERY ROAD).

TENDERS are invited for the BURNING-OFF and RESURFACING of approx. 7.000 sq. yd. of CARRIAGEWAY with Hot Rolled Asphalt, RE-LAYING of approx. 600 lin, yd. GRANITE KERS, Reconstruction in Bitumen Macadam of Footways, Partial Reconstruction of Carriageway Foundation, Footway, Drainage, and other anciliary works.

Drawings and Conditions of Contract may be only the property of the Council of Carriageway Foundation, Footway, Drainage, and other anciliary works.

Drawings and Conditions of Contract may be only the Council of Contract may be only the Council of Contract may be conceived the Council Offices, 4B Uxbridge Road, Stammore, Middlessex, on payment of Two Pounds by crossed cheque made payable to the Harrow Corporation, returnable where a bona-fide Tender reaches me within the prescribed time, prescribed forms, enclosed in a plain envelope bearing no indication of the sender, and endorsed "Tender—Repaying and Resurfacing—Whitchurch Lane," to be delivered the my Office not later than 10 a.m. on TUESDAY, 29th August, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

DAVID PRITCHARD,

Town Clerk.

Harrow Weald Lodge, 92 Uxbridge Road, Harrow, Middx

BOROUGH OF TAUNTON. WATER DEPARTMENT.

PRIORSWOOD ROAD-DURSTON TRUNK MAIN.

FIXED-PRICE TENDERS are invited for the LAYING of approx. 7,100 yd. of 91n. and 6in. dia. SPUN-HON PIPES with Tyton Joints.

Form of Tender, Specification and Bills of Quantities may be obtained from W. J. WONNACOTT. M.I.C.E., Engineer and Manager, Flook House, Station Road, Taunton, on payment of a deposit of Two Guineas (by cheque only), payable to the Taunton Corporation.

proration.

Tenders must be sent to me not later than 10 a.m.

WEDNESDAY, 20th September, 1961.

K. A. HORNE,

Town Clerk.

Municipal Buildings, Taunton, Som.

CONTRACTS

SUPPLEMENT

WARWICKSHIRE COUNTY COUNCIL.

HIGHWAY IMPROVEMENT.

WEEDON-ATHERSTONE-BROWNHILLS TRUNK ROAD, A.5.

A.427 TO RAILWAY BRIDGE.

TENDERS are invited for the RECONSTRUCTION of the ABOVE ROAD.
The Scheme comprises Widening and Superelevating the existing Carriageway, and includes Lean-Mix Concrete Foundations with Coated Macadam Surfacing.
The works are subject to the Ministry of Transport Standard Conditions of Tender, Contract and

The Normal Conditions of Jenser, Standard Conditions of Jenser, Specification.
The Drawings may be inspected at the Office of the The Drawings may be inspected at the Office of the County Surveyor, Shire Hall, Warwick, during normal County Surveyor, Shire Hall, Warwick, during normal

County Surveyor, Shire Hail, Warwick, during normal office hours.

Copies of the Form of Tender and the Bill of Quantities may be obtained from the same Office on payment of a deposit of \$2.2s, which will be returned upon receipt of a bona-find Tender or the return of the documents.

Tender on the third of third

L. EDGAR STEPHENS, Clerk of the Council.

SOKE OF PETERBOROUGH
COUNTY COUNCIL.

TENDER FOR THE SUPPLY AND DELIVERY OF TIMBER FENCING.

TIMMER FENCING.

TENDERS are invited for the SUPPLY and DELIVERY of approx. 650 lin. yd. of TIMBER FENCING.
Persons wishing to tender may obtain Form of Tender, Specification and Conditions, and any further particulars from the County Surveyor. County Offices. Bridge Street. Peterborogied to me, the undersigned, in the enders with the provided, and endorsed "Tender for in the Fencing," bearing no mark or indication as to the sender, not later than 10 a.m. on MONDAY.
21st August, 1961.
Neither the lowest nor any Tender will necessarily be accepted.

ERIC P. SMITH.

ERIC P. SMITH.

ROROUGH OF WEMBLEY. REINSTATEMENT OF TEMPORARY BUNGALOW

TENDERS, which must be received not later than Noon on 25th AUGUST, 1961, are invited for the ABOVE WORK, which comprises the Demolition of a Trench-type Air Raid Shelter and the Comprise of Dopen Space. Form of Tender, Bill of Quantities and Specification may be obtained from the BOROUGH ENGINEER AND SURVEYOR, Town Hall, Wembley, at whose Office Conditions of Contract and Drawings may be inspected.

I T Y Y O R K OF STREETS AND BUILDINGS COMMITTEE.

TENDERS are invited for the RECONSTRUCTION of the KNAVESMIRE CULVERT (Part), and ancillary works, comprising approved the comprising and comprising approved to the comprising approved to the comprising approved to the comprising approved to the comprising and the comprising approved to the comprising approved to the comprising approved to the undersigned, in the official printed Tender to the undersigned, in the official printed Tender control to the undersigned, in the official printed Tender control to the undersigned, in the official printed Tender control to the undersigned of the comprision of the co

The lowest or any Tender will not necessarily be accepted.

CHAS. J. MINTER, City Engineer, Surveyor and Planning Officer.

7 St. Leonard's Place,

CITY OF CANTERBURY.

LAYOUT OF PAVED AREAS—UNION STREET / NEW RUTTINGTON LANE HOUSING SITE.

TENDERS are invited for the LAYING of approx.
1,900 sq. vd. of VARIOUS TYPES of PAVING at
the Union Street New Ruttington Lane Housing Site.
Bill of Quantities, Specification and Form of Tender
may be obtained from the City Engineer, Municipal
Buildings, Dane John, Canterbury, and the Drawings
may be inspected at his Office during normal hours.
Tenders, in plain sealed envelopes endorsed 'New
titington the Company of the C

(Signed) J. BOYLE, Town Clerk

Municipal Buildings, Canterbury.

BRENTWOOD URBAN DISTRICT

HIGHWAYS ACT, 1959

PARK AVENUE.

TENDERS are invited for the MAKING-UP of this STREET.

TENDERS are invited for the MARKING-UP of this STREET.

Plan. Sections, and Conditions of Contract may be inspected, and Soecification. Form of Tender, Bills of Quantities and Schedules obtained from the Engineer and Surveyor, Council Offices, Brentwood, upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of a deposit of 21 to return a upon payment of 22 to return a upon payment

CONTRACTS

OF WORKSOP. BOROUGH

FIRM-PRICE TENDERS are invited from bona-fide building contractors for the ERECTION of 30 HOUSES in VALLEY ROAD ESTATE, Worksop.

Plans may be inspected, and copies of Conditions of Contract, Bills of Quantities and Form of Tender may be inspected, and copies of Conditions of Contract, Bills of Quantities and Form of Tender Rouse, Worksop upon be Borough England to Salvey the Contract Bills of Quantities, under separate cover, must accompany Tenders; they will be returned unopened to unsuccessful tendererers.

Tenders must reach the undersigned not later than 10 a.m. on FRIDAY, the 1st September, 1961.

The lowest or any Tender will not necessarily be accepted.

RUSSELL C. PHARAOH. Town Clerk.

BOROUGH OF TIPTON. TENDERS are invited for the FOLLOWING CONTRACTS:

TENDERS are invited for the FOLLOWING CONTRACTS:

(1) Aston Street Housing Site—Contract No. 2. Completion of Roadworks—650 sa. vd. Asphalt Surfacing, 240 sq. vd. Flag Paving, and 1,820 sq. vd. Turing, and ancillary Woodcroft Estate—Reconstruction of Roads. 5,300 sq. vd. Breaking Concrete Slabs and Reconstructing in Pitching with Dense Bitumer Macadam Surfacing; 2,200 sq. vd. Bitmac Footways.

Application of Pootways.

Application of Roads. Sp. vd. Breaking Concrete Slabs and Reconstruction in Pitching with Dense Bitumer Macadam Surfacing; 2,200 sq. vd. Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Application of Pootways.

Appl

K. W. MADIN, Town Clerk.

Municipal Buildings, Sedgley Road West, Tipton, Staffs.

OF WORCESTER. CITY

(RE-ADVERTISEMENT.)

TENDERS.

REDEVELOPMENT AREA, ST. JOHNS.

TENDERS are invited for the ERECTION of these DWELLINGS, comprising Traditional Brick-built Two-storey Blocks of One-bedroom Flats.

Documents obtainable from City Engineer and Surveyor, 22 Bridge Street. Worcester on deposit of Three Guineas (cheques payable to Worcester Corporation), which will be refunded after receipt of bona-fide Tender and the return of Tender documents.

Tenders to be Posted to the Town Clerk, to arrived taler than MONDAY, 18th September, 1961.

BERTRAM WEBSTER. Town Clerk.

Guildhall, Worcester,

BOGNOR REGIS URBAN DISTRICT

HIGHWAYS ACT, 1959.

MADEIRA AVENUE, HIGHCROFT AVENUE AND WESTWAY.

Fixed-price Tenders are invited for the MAKING-UP of MADEIRA AVENUE (approx. 225vd. in length), and control of the MAKING-UP of MADEIRA AVENUE (approx. 145vd. in length), and code of 1992, contained in the Highways and 1959. Tender documents may be obtained from the Engineer and Surveyor, Town Hall, Bognor Regis, on payment of a deposit of £2 2s, which will be returned upon receipt of a bona-fide Tender and the return of all documents, in plan scaled envelopes, bearing no mark Tenders, in plan scaled envelopes, bearing no mark Undersigned not later than First Post on MONDAY, 28th August. 1961.

The Council does not bind itself to accept the lowest or any Tender.

R. W. J. H.LL.

R. W. J. H'LL, Clerk of the Council.

Town Hall, Bognor Regis

BOGNOR REGIS URBAN DISTRICT

WICK LANE.

FIXED-PRICE TENDERS are invited for MAKING-UP PART of WICK LANE (75yd.), under the Code of 1892, contained in the Highway Act 1992.

Form of Tender and otherway Act 1992.

Form of Index of Edward 1992.

Form of Index 1992.

For Tender, in Diain sealed envelopes endorsed "Wick Lane—P.S.W. Tender," to be delivered to the undersigned not later than First Post on MONDAY. 28th August. 1961.

The Council does not bind itself to accept the lowest or any Tender.

R. W. J. HILL,

R. W. J. HILL, Clerk of the Council.

Town Hall,
Bognor Regis.

SLE OF WIGHT WATER BOARD.

MAINLAYING AT ROUD, NEAR GODSHILL, I.W.

MAINLAYING AT ROUD, NEAR GOUSHILL, I.W.
TENDERS are invited for the LAYING of approx.
6,500 lin. yd. of 4in. dia. CAST-IRON WATER
MAIN in the Roud area.
Applications for Tender documents and Drawings
thould be made to the Engineer and Manager, Isle of
Wight Water Board, St. Nicholas, 5B St. John's
Road, Newport, I.W.
Tenders are to be delivered in accordance with the
Tenders are to be delivered in accordance with the
Tenders are to be documents, to the Clerk to the
Board, County Hall, Newport, I.W., not later than
Noon, MONDAY, 11th September, 1961.
L. M. BANES,
Clerk to the Board.

CONTRACTS

BOROUGH OF YEOVIL

Applications are invited from persons wishing to TENDER for the DEMOLITION of a NUMBER of DWELLING HOUSES IN PARK STREET and LARKHILL ROAD.

Applicants should submit their applications to the undersigned not later than Noon on MONDAY. 21st August. 1961, giving the names of Authorities for whom they have carried out similar work. Firms invited to tender will receive the necessary documents and be notified of the last date for receipt of Tenders.

A. HEAL, M.I.Mun.E., Borough Surveyor,

Municipal Offices, Yeovil

BOROUGH OF RUGBY.

CONSTRUCTION OF FOOTWAYS

CONSTRUCTION OF FOOTWAYS.

The CORPORATION invite TENDERS for the CONSTRUCTION and SURFACING in HOT ROLLED ASPHALT of approx. 3,000 sq. vd. of FOOTWAY in VARIOUS ROADS in the ABBOTS FARM AREA together with Precast Concrete Edging and Laying-out Verges, and all incidental work and all incidental works and all incidental

ESHER URBAN DISTRICT COUNCIL.

FOOTPATH RECONSTRUCTION SCHEME-

CONTRACT NO. 324.

The Council invite TENDERS for the ABOVE WORKS, which comprise the FOLLOWING:

(1) Reconstruction of Various Footpaths in Heconstruction of Council Offices, 190 approx. 2.500 sq. yd. Southwater Brick 190 approx. 2.500 sq. yd. Southwater Brick 190 approx. 2.500 sq. yd. Southwater Brick 190 approx. 400 sq. yd. of Re-laying on 3in. Concrete Base. Lane, Clayagate, Involving approx. 900 sq. yd. of Hoggin Footpath. 175 lin. yd. of 9in. discounties approx. 900 sq. yd. of Hoggin Footpath. 175 lin. yd. of 9in. Souries Water Sewer, and various Form of Hender, Specification and Bills of Quantities may be obtained from the Engineer Surveyor's Department, Council Offices, Esher, unpayment of a deposit of One Guinea which will be refunded on receipt of a bona-fide Tender, together with the return of all the documents in good condition. Lenders, on the prescribed form, enclosed in the crevelope provided, endorsed "Contract No. 324," and bearing no name or mark indicating the sender, and bearing no name or mark indicating the sender, 5 p.m. on FRIDAY, the 1st September, 19 accept the lowest or any Tender.

FREDERICK EDWARDS, Esher, Surrey.

FRIERN BARNET URBAN DISTRICT

CONSTRUCTION OF ESTATE DEVELOPMENT ROAD.

TENDERS are invited for the CONSTRUCTION of 135yd, of REINFORCED CONCRETE CARRIAGEWAY, together with Kerbs and Surface Water Drains, at COPPETTS ROAD, N.10.

RECONSTRUCTION OF JUNCTION FRIERN BARNET LANE, B.SSO-TORRINGTON PARK.

LANE, B.550-TORRINGTON PARK.

TENDERS are invited for RECONSTRUCTION and SUPERELEVATION WORKS at the above-named Junction, including Realignment of Carriageway, Kerbing, Concrete Foundation with Hot Rolled Asphalt Intelligence of the Asphalt Intelligence of the Engineer and Tender documents or either of the above Contracts obtained from, the Office of the Engineer and Surveyor, Town Hall, Friern Barnet, N.11.

Tenders, in the envelopes provided, bearing in indication of the sender, are to be delivered to the undersigned not later than Noon on MONDAY, 4th September.

R. S. CLOTHIER

R. S. CLOTHIER, Clerk of the Council.

2nd August, 1961. HAYES AND HARLINGTON URBAN DISTRICT COUNCIL. SUPPLY OF GROUP "B" STREET LIGHTING COLUMNS.

TENDERS are invited for the SUPPLY of GROUP
"B" STEEL STREET LIGHTING COLUMNS. Type
Stewart and Lloyd GB.1005, or similar as specified
for the period from 1st September, 1961, to 31st
March, 1962. Tender documents are obtainable fine
the Engineer and Surveyor. Town Hall, Hayes, defer
the Engineer and Surveyor. Town Hall, Hayes, defer
Contract. No. 627—Group "B" Street Lighting
Columns." but not indicating the sender, to be
received by the Clerk and Solicitor of the Council
at the above address, by 30th AUGUST, 1961.
The Council does not bind itself to accept the
lowest or any Tender.

Canvassing disqualifies.

GEORGE HOOPER.
Clerk and Solicitor of the Council.

PORDER RURAL DISTRICT COUNCIL.

BORDER RURAL DISTRICT COUNCIL. WEST HALL SEWAGE DISPOSAL WORKS.

WEST HALL SEWAGE DISPOSAL WORKS.

The Council invite TENDERS for the PROVISION of a SMALL SEWAGE PLANT for the Village of WEST HALL.

The works include Settling Tank, Filter, Humus Tank and Sludge Beds, together with associated Piper Contracturs with necessary experience, plant and labour force, desirous of tendering, should submit their names and addresses, together with deposit of £2 2s., to the Council's Engineer, following which the Specification and Bill of Quantities will be forwarded.

A. C. CRANE.

A. C. CRANE. Clerk of the Council. 7 Victoria Place, Carlisle. 1st August, 1961.

L

of

Y.

LED VAY

ived BER.

CIL.

OVE in Prox. With Prox. and

uan and upon I be ether tion. the 24," nder, than

the il.

ICT

DAD.

RNET

no the

cil.

TON

NG

ROUP Type cified. 31st from 4iddx. er for phting o be ouncil. 1. t the

ICIL.

ISION De of lumus Pipeand ubmit sit of which

CONTRACTS

NORTH RIDING OF YORKSHIRE

TENDERS are invited for the PROTECTIVE TREAT-MENT and PAINTING of BRIDGE STEELWORK in a DEPOT at THRSK.
Apply for Specification, etc., to the COUNTY SURVEYOR, County Hall, Northallerton. Closing date for Tenders, 25th SEPTEMBER, 1961. BOROUGH OF CHATHAM.

RESURFACING OF LUTON ROAD AND

TENDERS are invited for the ABOVE WORKS, comprising the Mechanical Laying of Fine Cold Asphalt. Solution of the Above Works, comprising the Mechanical Laying of Fine Cold Asphalt. Solution of the Above Works, and the Ab documents.

Tenders must be delivered to the undersigned by Noon on MONDAY, 4th September, 1961.

The Council do not bind themselves to accept the lowest or any Tender. ROWLAND NEWNES. Town Clerk.

Town Hall, Chatham. August, 1961.

WALTON AND WEYBRIDGE

PRIVATE STREET WORKS.

(A) COTTIMORE CRESCENT: AND

(B) COTTIMORE LANE.

(B) COTTIMORE LANE.

TENDERS are invited for the MAKING-UP of the ABOVE STREETS, under the Highways Act, 1959. The work comprises: (a) The Surfacing of approx. 2,450 sq. vd. of existing Hardcore Carriageways, the Construction of Footways with Bitumen Macadam, Laying of Blue Brick Channels, together with other incidents of Hardcore and Bitumen Surfacing, 66 construction of Bitumen Macadam Footways, Laying of Kerb and Blue Brick Channels, and approx. 100 lin, vd. c. 9 n. Surface Water Sewer.

The Specifications, Bills of Quantities and Forms of Tender may be obtained from, and the Plans and Conditions of Contract inspected, at the Office of the Engineer and Contract inspected, at the Office of the Engineer and Contract inspected, at the Office of the Contract of the Council, Council Offices,

Tenders are to be enclosed in plain sealed envelopes and or contract inspected, at the Office of the Council of Council Council Offices,

Tenders are to be enclosed in plain sealed envelopes and or council council council offices.

Tenders are to be enclosed in plain sealed envelopes and council of the Council offices. The Council of Council of Council of Council Offices, and or council of the Council of
Sin September. 12 The Council do not bind themselve. The Council do not bind themselve. 12 The Council downst or any Tender. 12 The Council Clerk of the Council.

Council Offices, Walton-on-Thames, Surrey, 1st August, 1961.

WHITWORTH URBAN DISTRICT

MAKING-UP OF LLOYD STREET, WHITWORTH.

MAKING-UP OF LLOYD STREET, WHITWORTH.
TENDERS are invited for the MAKING-UP of the
ABOVE STREET.
The Work includes Altering Levels of approximately
200yd, of Carriageway and Footways, Tarmacdam
surfacing and Concrete Flagging.
Copies of the Contract Drawings. General Conditions and Specification may be obtained from the
Council's Surveyor at the Council Offices, Whitworth.
or Lived Street," must be delivered to the undersigned
not later than 12 Noon on MONDAY, 28th August,
1561.

not later than 12 Noon on Montelling 1961.
The Council do not bind themselves to accept the lowest or any Tender.
E. R. CRAWSHAW.
Clerk of the Council.

Council Offices, Whitworth, Rochdale, 28th July, 1961.

HEBBURN URBAN DISTRICT COUNCIL.

INSTALLATION OF LAVATORY BASINS AND ALTERATIONS TO HEATING AND WATER SUPPLY SYSTEMS TO EXISTING COUNCIL HOUSES.

TENDERS are invited for the SUPPLY of the FOLLOWING MATERIAL required for the above

Alterations:

32 30in. x 15in. Copper Cylinders.

32 30in. x 15in. Copper Cylinders.

32 40in. x 15in. Copper Cylinders.

32 40in. x 15in. Copper Cylinders.

32 40in. x 15in. Copper Cylinders.

32 60in. 12 10in. 15in. Copper Tube.

32 60in. 12 10in. 15in. 15in. 19in. 10in. 10in. 10in.

3.550 1in. 12 10in. 11in. 19in. 19in. 10in. 10in. 10in. 10in. 10in.

3.550 1in. 12 10in. 10in. 19in. 19in. 19in. 10in. 10

later than Noon on WEDNESDA!.

1951.
The Council does not bind itself to accept the lowest or any Tender.

W. KINGHORN.

W. KINGHORN, Clerk of the Council. Council Offices, Counci

ALFRETON URBAN DISTRICT COUNCIL.

TENDERS, STREET LIGHTING.

TENDERS, STREET LIGHTING.

TENDERS are invited for the INSTALLATION of 179 LIGHTING UNITS. Including 140-watt Sodium Allas Lamps and Staten.

Allas Lamps and Staten.

Forms of Tender. Specifications and Bills of Quantity may be obtained from the Engineer and Surveyor upon a deposit of £2 2s., which will be refunded on reteint of a bona-fide Tender.

Tenders must be deposited not later than 12 Noon in all plays, the 26th August, 1961, addressed to me in all the properties of the state of the sta

H. TAYLOR, Clerk of the Council.

Council Offices, Nottingham Road, Alfreton, Derbys.

CONTRACTS

LONDON COUNTY COUNCIL

WANDSWORTH ROAD WIDENING.

WANDSWORTH ROAD WIDENING.

TENDERS are invited from contractors having considerable experience of large road construction works, for the WIDENING of WANDSWORTH ROAD. Lambeth, between Nine Elms Railway Bridge and Lambern between the Elms Railway Bridge and Lambern between the Elms Railway Bridge and Lambern of Tender, Specification, etc., and Drawings are obtainable from the Chief Engineer upon payment of 5.5 by crossed cheque or order made payable to the London County Council, which will be returned only if a bona-fide Tender is submitted and not subsequently withdrawn.

Contract and other relevant documents may be inspected on personal application at Room 450D, post, should be addressed to the Chief Engineer. County Hall, Westminster Bridge, S.E.1.

No Tender received by the Clerk of the Council after 3 p.m. on MONDAY, 11th September, 1961, will be considered.

The Ceuncil does not bind itself to accept the lowest or any Tender.

G. FARRINGTON.

FLINTSHIRE COUNTY COUNCIL.

HIGHWAYS DEPARTMENT.

TENDERS invited for SUPPLY and DELIVERY of Second Quality EARTHENWARE PIPEs and FITTINGS. Forms obtainable from County Surveyor, Liwyneprin, Mold, to be returned to me by not later than Noon, MONDAY. 28th August, 1961.

W. HUGH JONES.
Clerk of the County Council.

County Buildings, Mold.

BUCKS. COUNTY COUNCIL. NEWPORT PAGNELL-BEDFORD ROAD, A.422. ROADWORKS-CHICHELEY VILLAGE.

ROADWORKS—CHICHELEY VILLAGE.

TENDERS are invited for the RECONSTRUCTION and WIDENING to 24ft. of approximately 1,300yd. of CARRIAGEWAY in CONCRETE and TARMACADAM SHAPING including Footways, Kerbing. Channelling, Drainage, and ancillary Works. Channelling, Drainage, and ancillary Works. Victorial County Offices, Aviesbury, from whom Contract documents may be obtained on payment of a deposit of £2, returnable on receipt of a bona-fide Tender.

Tenders must be received by me by 10 a.m. on MONDAY, 4th September, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

R. E. MILLARD,
Clerk of the Council.

PLUCKS. COUNTY Y COUNCIL.

BUCKS. COUNTY COUNCIL. THE HIGHWAYS ACT. 1959. THE CODE OF 1892.

CROFT ROAD, CHALFONT ST. PETER.

CROFT ROAD, CHALFONT ST. PETER.

TENDERS are invited for the MAKING-UP of the ABOVE STREET.
Specification. Form of Tender and Contract, and Bill of Quantities may be obtained from the County Offices. Aylesburg of County Offices. Aylesburg of the Applications must be accompanied by a remittance has present the prefunded on receipt of a bonalized fenders must be delivered to the undersigned MONDAY. 4th September, 1961, in the envelope provided, endorsed "Private Street Works—Croft Road," but not bearing any name or mark indicating the sender.

the sender.

The Council do not bind themselves to accept the lowest or any Tender.

P. F. MILLARD. R. E. MILLARD,
County Hall, Clerk of the Bucks, County Council,
Aylesbury.

lesbury. August, 1961.

BOROUGH OF AYLESBURY. EASTERN AREA DRAINAGE.

EASTERN AREA DRAINAGE.

TENDERS are invited, on a FIXED-PRICE BASIS, for the LAYING OCONCRETE and GLAZED STONEtrong the LAYING CONCRETE and GLAZED STONEtrong fine to 15in. including Concrete Ring and Brick
Manholes, Guilles and Connections, and ancillary
Works, in Five Drainage Areas of the Town.
Form of Tender, Specification and Bills of Quantities
may be obtained from the office of the Borough
Regineer and Surveyor Filarsrother by the Borough
regineer and Surveyor Filarsrother by the Borough
regineer and Surveyor Filarsrother by the Borough
deposit of Two Guineas, returnable after the receiot
of a bona-fide Tender and the return of all documents.
Tenders, in a plain sealed envelope endorsed
'Eastern Area Drainage,' must be delivered to the
undersigned not later than Noon on THURSDAY.

21 August 10 does not bind itself to accept the
lowest or any Tender.

R. D. W. MAXWELL.

R. D. W. MAXWELL. Town Clerk. Town Hall, Aylesbury, Bucks,

CARSHALTON URBAN DISTRICT

MECHANICAL SWEEPER-COLLECTOR.

MECHANICAL SWEPPER-COLLECTOR.

TENDERS are invited for the SUPPLY and DELIVERY of a Diesel-engined MECHANICAL SWEPPER-COLLECTOR. Tenderers will be required to the process of the second
CECHNICAL ESTIMATING SERVICE. The most accurate estimating service in the country. All ades, large or small. GUARANTEED RESULTS. lodest fees.—Send for details to 73 Leadenhall reet, London, E.C.3. Tel.: Ave 9676.

For Contracts received too late for classification see page 685

APPOINTMENTS VACANT

LANCASHIRE COUNTY COUNCIL.

APPLICATIONS are invited from suitably qualified ENGINEERING ASSISTANTS for vacancies un Grades A.P.T. II (\$1.140).
A.P.T. II (\$950-\$1.40) and A.P.T. IV (\$1.140-\$1.310) in the Court of th

METROPOLITAN BOROUGH OF

BUILDING SURVEYOR, A.P.T. Grade III (£950-£1,140 per annum, plus weighting) REQUIRED on staff of the Borough Engineer and Surveyor. Applicants must be capable of carrying out building surveys, preparing estimates, specifications for converting premises and the supervision of these works. Application forms, obtainable from the Borough Engineer and Surveyor, with the names of three referees, should be received not later than MONDAY. 21st works. The staff of the converting the converting Town Hall 1961. Town Hall 1961. Chelsea, S.W.3.

BOROUGH OF LOUTH.

RAITHBY PUMPING STATION AND HORNCASTLE APPOINTMENT OF CLERK OF WORKS

APPLICATIONS are invited for the ABOVE APPLICATIONS are invited for the ABOVE APPOINTMENT from persons with suitable experience. The successful candidate will be required to supervise the execution of contracts involving buildings of reinforced concrete, structural steel, and brickwork. The salary will be within the range £1,100-£1,300 to superince and qualifications. Housing accommodation will be made available in necessary.

Applications, giving full personal details, details of experience, and previous appointments, and the mames of three referees, should be addressed to the undersigned, to arrive not later than FRIDAY, 25th August. The envelope should be endorsed "Clerk of Works."

Town Hall.

Town Hall, Louth, Lincs. 27th July,

BOROUGH OF EDMONTON.

BOROUGH ENGINEER AND SURVEYOR'S

CHIEF ASSISTANT ENGINEER-N.J.C. SCALE "C."

APPLICATIONS are invited for this APPOINTMENT from fully qualified Engineers. Salary N.J.C. Scale "C" (£1,560 x £70(3) x £55—£1,825). Casual user allowance. The Council are proceeding with an extensive programme of capital works, both by contract and by direct labour. The person appointed will be in charge of the drawing office. Five-day week. The Council are prepared to grant loans up to 100 per cent. of valuation to facilitate house purchase.

house purchase.

Applications, on forms obtainable from the Town
Applications, on forms obtainable from the Town
Clerk, Town Hall, Edmonton, must be delivered by
the 28th AUGUST, 1961.

H. BACKHOUSE,
Town Clerk.

BOROUGH OF MACCLESFIELD.

ASSISTANT ENGINEER.

APPLICATIONS are invited for the ABOVE APPOINTMENT in the Borough Engineer's Department. Selling A.P.T. IIII (£586-£1,310 per annum). Commends salary according to experience. Applicants must hold an appropriate qualification. Particulars obtainable from the Borough Engineer. Town Hall, Macclesheid, to whom applications should be delivered not later than SATURDAY, 2nd September, 1961.

Town rem, be to later than SALUMEN 1961.
1961.
Housing accommodation will be provided, if required.
WALTER ISAAC.
Town Clerk.

CITY OF PLYMOUTH.

APPLICATIONS are invited for the APPOINTMENT of ASSISTANT ENGINEER, Grade A.P.T. IV (£1,140 to £1,310). to £1.310).

Applicants must be Corporate Members of the Institution of Civil Engineers or of the Institution of Municipal Engineers, and be experienced Civil or Municipal Engineers.

Applicants
Institution of Civil Engineers or or Municipal Engineers, and be experienced Civil or Municipal Engineers, and be experienced Civil or Municipal Engineers, or the Council to pay half the cost of household removal expenses up to a maximum contribution of £25.

Housing accommodation may be available in certain circumstance of the contribution of £25.

The appointment is superannuable, subject to medical examination, and the age limit is 40 years, or 45 years if serving with another Local huthority. Applications, the contribution of £25 has been contributed by 26th AUGUST, 1961.

City Engineer and Surveyor.

BIRMINGHAM TAME AND DISTRICT DRAINAGE BOARD.

SALTLEY TO MINWORTH SEWER. INSPECTORS.

INSPECTORS.

APPLICATIONS are invited from persons experienced in tunnelling work for APPOINTMENTS under the supervision of the Engineer to the Board, Rookery Park, Erdington, Birmingham, 24, of INSPECTORS, Concertime, subject to National Conditions for Building and Civil Engineering Operatives.

The Contract period is 28 months. The persons appointed will be required to work in shifts at the discretion of the Chief Resident Engineer.

APPLICATIONS, stating age, qualifications, present and past posts and details of experience, together with the undersigned not steer than First Post on MONIAAY, 4th September, 1961.

ARTHUR J. WRIGHT.

Clerk's Office.

Clerk's Office. Lombard House, Great Charles Street, Birmingham, 3. 1st August, 1961.

APPOINTMENTS VACANT

SUPPLEMENT

ROYAL COUNTY OF BERKSHIRE.

APPLICATIONS are invited for the FOLLOWING APPOINTMENTS on the staff of the County

(1) Assume that the property of the country of the

(3) Material (3) Material (4) M

METROPOLITAN BOROUGH OF

CLERK OF WORKS REQUIRED, Borough Engineer's

CLERK OF WORKS AP.T. IIIII (E815-£1,140 plus London Weighting).

Permanent, superannuable appointment. Commencing salary within Scales according to qualifications and experience. Applicants should have served apprenticeship within building transport of Certificate of Clerk of Works. or equivaliding works as General Foreman supervision of Certification. Experience in Works of Works is essential.

Weight of Works is essential.

BOROUGH

APPOINTMENT OF OUTDOOR SUPERVISOR.

BOROUGH ENGINEER'S DEPARTMENT.

APPLICATIONS are invited for the APPOINTMENT of an OUTDOOR SUPERVISOR in the Department of the Borough Engineer and Surveyor expected to have a considerable expected to the c

industried.

The salary will be in accordance of £160 per annual part of the salary will be in accordance of £160 per annual part of £160 per annual p aired. salary will be in accordance with A.P.T. Grade a fixed car allowance of £160 per annum will II. be

Mousing accommodation will be little required.
Forms of application may be obtained from MR.
B. J. SWEENEY, M.I.Mun.E., F.R.I.C.S., Borough Engineer, Surveyor and Water Engineer, Municipal Offices, Falmouth, to whom they should be returned not later than SATURDAY, the 26th August, 1961.
Canvassing will disquality.
E. J. K. GIBBONS, Town Clerk.

Municipal Offices, Cornwall.

CITY PLYMOUTH. OF

APPLICATIONS are invited for the APPOINTMENT of ASSISTANT ENGINEERS, Grade A.P.T. III (£960-£1.40).

It is the practice of the Council to pay half the cost of household removal expenses up to a maximum contribution of £25.

Housing accommodation may be available in certain circumstances. The council to pay half the cost of household removal expenses up to a maximum contribution of £25.

Housing accommodation may be available in certain circumstances. The council cou

J. ACKROYD, City Engineer and Surveyor.

The Guildhall,

BEESTON AND STAPLEFORD

APPOINTMENT OF RESIDENT ENGINEER/

APPLICATIONS are invited for this POST to supervise the extension of Beeston Sewerage Works. on Grade IV (£1.140-£1.310), commencing salary according to qualifications and experience. The post is temporary, for a period of approx. two years, but can be superannuated if desired. Preference will be given to a qualified applicant, and considerable experience in the supervision of contract work is required the property of the provided in the supervision of contract contracts the provided in the supervision of contract contracts with the names of two referees, to be forwarded to the Engineer and Surveyor, Town Hall, Beeston, Nottingham, not later than 21st AUGUST, 1961.

H. D. JEFFRIES, Clerk of the Council.

WEST DEAN RURAL DISTRICT

APPOINTMENT OF TEMPORARY RESIDENT ENGINEER.

TEMPORARY RESIDENT ENGINEER.

APPLICATIONS are invited for the APPOINTMENT of TEMPORARY RESIDENT ENGINEER to supervise, under the direction of the Council's Consulting Engineers, MESSRS. WILLCOX, RAIKES AND MARSHALL, the construction of sewers, manholes as the construction of sewers, manholes are comprising settlement tanks, circular filters, humus tanks, sludge drying beds, sludge pumping station, and other incidental works of an approximate total Contract value of £160,000.

The duration of the appointment is expected to be approximately two years, and is terminable by two months notice on either side.

Qualifications and experience, salary required, with particulars of past and present employment, and accompanied by copies of two recent testimonials, must be received by the undersigned not later than THURSDAY, the 24th August, 1961.

A. F. GILLO,

A. F. GILLO, Clerk of the Council.

Council Offices, Coleford, Glos. 4th August, 1961.

APPOINTMENTS VACANT

METROPOLITAN BOROUGH OF

CLERK OF WORKS REQUIRED for extensive new using scheme. Salary in A.P.T. II (£815-£960 plus ndon Weighting). Commencing salary according to

experience.

Experience in the supervision of piling and structural work for erection of tall blocks of flats, and layout of estates is essential.

Particulars and Application Forms obtainable from TOWN CLERK, Town Hall, Bethnal Green, E.2.

Completed forms returnable by Noon, 28th AUGUST, 1961.

COVENTRY CORPORATION.

SENIOR RESIDENT ENGINEER, A.P.T. III/IV (£960-£1,310), and ASSISTANT RESIDENT ENGINEER (Temporary), A.P.T. III (£960-£1,140) REQUIRED to supervise work on the Inner Ring Road, which is a part of the major road programme. Applicants should be experienced in the supervision of road and sewer work. Commencing salaries according to qualifications and experience.

Commencing salaries according to qualifications and experience.

Housing accommodation may be available.
Application Forms, from CITY ENGINEER, Council House, Coventry, returnable by 21st AUGUST, 1961.

HEREFORDSHIRE WATER BOARD.

RESIDENT ENGINEER—CONTRACT NO. 23.

RESIDENT ENGINEER—CONTRACT NO. 23.

APPLICATIONS are invited for the APPOINTMENT of RESIDENT ENGINEER, to supervise the construction of water supply works in the Bromyard district of Herefordshire, under the direction of the Consulting Birmingham and Portmadoc.

The work in this contract will include laying about five and a half miles of absetsos-cement and cast-iron pipes up to 6in., and the appointment will be for a minimum period of 12 months, starting during a further two years, for the supervision of the construction of treatment works, reinforced concrete reservoirs and additional pipe laying.

Applicants must have held appointments as resident engineer on similar works for a minimum period of seven years. Corporate membership of the Institution would be preferred age between 35 and 60 years, The salary will depend on qualifications and experience, but will not be less than £1,200 per annum, of which £200 will be regarded as expenses, a car for his use on the works and will be paid car allowance on the Board's standard scale.

Applications, stating age, qualifications, details of experience, present and past appointments for the past 10 years, and names and addresses of consulting engaged, are to be sent in a plain envelope undersigned not later than TUESDAY. the 29th August, 1961.

H. R. PENHALE,

Clerk of the Board.

ENGINEERS REQUIRED for general duties on various main drainage contracts throughout the country.—Apply C. V. BUCHAN AND CO., LTD., Victoria Road, Burgess Hill, Sussex.

QUALIFIED and experienced QUANTITY SURVEYOR REQUIRED. Cost-conscious. Wide knowledge of the building trade. Supervision and control of subcontracts, negotiation of contracts, experience in housing, and large factory and office extensions. Large-scale building and civil engineering. Works procedure to final accounts. — Write Box V.4594, "The Contract Journal."

A SSISTANT PLANT MANAGER REQUIRED by medium-sized plant hire and contracting firm or South Coast.—Applications, stating full particulars, to the General Manager, G. and G. F. MAIDMENT (POOLE), LTD., Cranbrook Road, Parkstone, Dorset

ENGINEER AGENT for civil engineering contract in Home Counties. Progressive post in rapidly expanding company for a man experienced in deep excavation. Write Box V.4554, "The Contract lournal."

Works MANAGER REQUIRED for civil engineering contractor in Bedford. Remuneration £1,500
plus pension and bonus scheme. Excellent opportunities with a rapidly growing organisation.—Write
Box V.4853, "The Contract Journal."

CIVIL ENGINEERING ASSISTANT ESTIMATOR.

Must be experienced, and preferably have had site experience as an Engineer. Permanent position, with pension scheme.—Write in first instance to SIR JOHN JACKSON, LTD., 53 Victoria Street, London, S.W.1.

TECHNICAL REPRESENTATIVE REQUIRED, aged 25-35. with wide experience of civil engineering work.—Please apply in first instance by letter, giving details of education and professional experience, and submit the names of two references, to CONSOLIOATED PNEUMATIC TOOL CO., LTD., 471 Chester Road, Manchester, 16.

SITE ENGINEER REQUIRED for large civil engineer-ing work with expanding company. Excellent career and experience, with commensurate salary and pension scheme.—Write Box V.4555, "The Contract

BUILDING MANAGER

REQUIRED by an old-established firm of civil engineering contractors to take charge of a new building section. The position offers great possibilities to a man who is determined to progress. Applicants should have had wide experience in all forms of building, have had wide experience in constant development, and be capable and experience of the progress of the pro

BOX V.4511, "THE CONTRACT JOURNAL."

QUANTITY SURVEYOR REQUIRED for civil engineering company. Salary commensurate with experience. Please send full details of experience, together with references. — JAMES BENNETT (CONTRACTORS), LTD., Helsby Street, Warrington.

DLANT HIRE company REQUIRE MANAGER for South London/Surrey area. Must be fully conversant with commercial procedure and, if possible have contacts in the area. A knowledge of repairs would be helpful but not essential. Assistance with accommodation if required. — Write Box V.4503. "The Contract Journal."

APPOINTMENTS VACANT

CLASSIFIED ADVERTISEMENT RATES:

Classification		First Four Lines or Less	Additional Line
APPOINTMENTS	VACANT	12/-	2/6
APPOINTMENTS	WANTED	7/6	1/6
WORK REQUIRE NESS OPPORT BUSINESSES FO DIVING, FINANS FESSIONAL S AGENCIES, HI TURAL, PROPER BY AUCTION, AND MISCEL	UNITIES, R SALE, CE, PRO- ERVICES, ORTICUL- TY, SALE PLANT	14/-	3/-
BOX	NO. 1/-	EXTRA.	

PNGINEERS. experienced in structures and road.
works. REQUIRED for Great West Road contract.
Write, giving full details of experience, last three
employers and salary required, to Contracts Manager,
FITZPATRICK AND SON (CONTRACTORS), LTD.
455 Old Ford Road, London, E.3.

455 Old Ford Road, London, E.3.

THE CROPT GRANITE, BRICK AND CONCRITE
CO., LTD., Croft, Leicestershire, REQUIRE in
ASSISTANT WORKS MANAGER at their Croft Works
spun and precast concrete products. The successful
applicant will be required to assist initially in the
installation of extensions to the company's standard
installation of extensions to the company's standard
and experience, to the Works Direction.

and experience, to the Works Director.

GENERAL FOREMAN, capable of earning £2,000
a year, WANTED for prestressed concrete bridge
in South of England. Must be a first-class man, fully
experienced in heavy civil engineering construction
particularly where high-quality shuttering is required.
Salary will debend upon experience, but with bonus,
overtime and allowances will be as high as £2,000
with brief details, of career, to Box V.4652, "The
Contract Journal."

ESTIMATOR

Experienced CIVIL ENGINEERING ESTIMATOR REQUIRED for head office appointment. Site and estimating experience required in some or all of the following: Heavy reinforced and mass content following: Heavy reinforced and mass content following and dams, Good salary, conditions and prospects, and entry into company's superannuation scheme arranged after probationary period. — Apply, in writing, to:

THE MITCHELL CONSTRUCTION CO., LTD.,
Wharf Works, Peterborough

A GENT WANTED for concrete piled sea outfall in South Wales. The appointment will be a permanent one, and offers excellent prospects to a keen young Engineer with some previous experience of piling work. — Write in confidence to Box V.4612, "The Contract Journal."

CIVIL ENGINEERS (Senior and Assistants) RE-GUIRED by London civil engineering contractor for a variety of interesting contracts embracing bridge and marine works in S.W. and N.W. England. Write brief details of experience to Box 696 L.P.E. 60/62 St. Martin's Lane, London, W.C.2.

EXPERIENCED SITE ENGINEER REQUIRED by civil maintenance on tractors, for roadworks, main crailengineering contractors, for roadworks, maintenance, carrytostion is permanent, with pension scheme, carrytostion is permanent to higher grades in an expanding organistancement to higher grades in an expanding organistation. Write in confident stating age, full details of which we conclude the contract of the contract pournal."

GENERAL FOREMAN AGENT (trade essential) REQUIRED by Southern Area civil engineering contractors. Permanent, progressive position is offered to experienced, energetic men.—Write, giving details of salary, age and experience, to NICHOLSON CONSTRUCTION CO., LTD., Freeland House, Cranleigh, Surrey.

A. MONK AND CO., LTD.

Warrington, Lancs, have vacancies for SENIOR and ASSISTANT CIVIL ENGINEERS on contract sites 10-15 miles radius of Warrington. Applications are invited from young qualified engineers who are ken and energetic, capable and experienced in the duties and responsibilities associated with these positions. Permanent and progressive posts.—Applications, in continence, stating age, full details of experience and qualifications, etc., to:

Personnel Manager, A. MONK AND CO., LTD., Padgate, Warrington, Lancs.

ENGINEER AGENT.—Medium-sized and expanding Birmingham company of civil engineering contractors engaged on a variety of works and with sound financial resources, propose to appoint an additional Engineer Agent to be based in Birmingham when the company of the company will expect and considerable experience in organising and carring out civil engineering contracts of various types up to final account stage. The company will expect and demand hard work, loyalty and initiative, and in return rewards will be commensurate.—Applications in writing, which will be treated in strict confidence, giving full details of career to date, including status, giving full details of career to date, including status, qualifications, age, education, and approx. salary required, to Box V.4609, "The Contract Journal."

EXPERIENCE CIVIL ENGINEER REQUIRED in civil engineering contractors' London office. Duties include tendering, planning, and assisting in the control of contracts. Most of the work will be concerned with major civil engineering works abroad, and some travel may well be involved.—Write Box V.4409, "The Contract Journal."

Young Engineer REQUIRED as Personal Assist-ant to director of civil engineering contractors, near Surbiton.—Phone ALDERTON CONSTRUCTION, LTD., LOW 2192, for appointment.

APPOINTMENTS VACANT

APPOINTMENTS VACANT

THE FULLERS' EARTH UNION, LTD, Redhill, Surrey, a member of the Laporte Group of Companies REQUIRE a CIVIL ENGINEER with good academic background and experience in soil mechanics, to advise of Bentonite of the development and sales of Bentonite of the development and sales of Bentonite of the development and sales of Bentonite of the sales of the

BUILDING OVERSEAS (LONDON BASED)

Substantial national building and civil engineering contractors REQUIRE BUILDING CONTRACT MANAGER WILLIAM CONTRACT MANAGER CO

BOX V.4548, "THE CONTRACT JOURNAL."

CALES REPRESENTATIVE.—Due to continued expan-join, we can now offer an interesting and progressive position on our sales staff. The successful applicant must have sales experience of contractors' plant, and a knowledge of the Greater London area would be an advantage.—Write, giving details of experience, age, and salary required, to the Sales Manager, GREENHAM EQUIPMENTS, LTD., Clayton Road, Ruislip Road, Greenford, Middlesex.

ge lly

OR

ll in nent oung illing 612,

RE-actor acing land. .P.E.,

civil main thern ension offers trades tence. past Box

) RE-eering offered details OLSON Cran-

R and sites on are keen duties ositions. in are and

panding
TE Condo with
Jint an
Jingham,
Jingham

Assist-tractors.

Manager, GREENHAM EQUIPMENTS, LTD., Clayton Road, Ruisling Road, Greenford, Middlesex.

CINERAL FOREMEN Concrete structural heavy civil engineering works and general building most construction. Applicants should be able to organise merious experience, and a background of adequate rade and technical training. The positions are permanent, emitting details of training and previous with qualifications and ability.—Apply in writing, giving full details of training and previous manager, ROBERT M. DOUGLAS (CONTRACTORS), LTD., 395 George Road, Erdington, Birmingham, 23.

IAMES MILLER AND PARTNERS, LTD.

REQUIRE a GENERAL FOREMAN for civil engineering contracts. Unusually good opportunities are offered to a man with drive and ability capable of taking responsibility for major works. Remuneration includes bonus and a pension scheme.—If you are considering changing, write, with full details, to:

JAMES MILLER AND PARTNERS, LTD., Pump Lane, Haves, Middlesex,

WANTED, QUARRY MANAGER for limestone quarry. Must be experienced in all aspects of oated and dry stone production, working on a mechanised basis. Accommodation and car after proven trial.—Write 8ox V.4552, "The Contract

ENGINEER REQUIRED for tunnel contract in com-pressed air, London area.—Apply C. V. BUCHAN AND CO., LTD., Victoria Road, Burgess Hill, Sussex. AND CO., LTD., Victoria Road, Burgess Hill, Sussex.

CENIOR ENGINEER REQUIRED for large multistorey building contract in London. Preferably

AM.C.E. Good and consecution of the contract of

TOWARD HUMPHREYS AND SONS, Consulting I Engineers, West Street, Epsom, REQUIRE RESIDENT ENGINEER FOR Ashington and Washington, Sussex, sewerage scheme, consisting of small sewage disosal works and some eight miles of sewers. Experience of a similar works essential.—Write General Manager for application forms.

LAND AND MARINE CONTRACTORS, LTD.

International civil engineers and submarine pipeline specialists. REQUIRE reports and submarine pipeline specialists. REQUIRE reports and submarine pipeline specialists. REQUIRE reports and submarine specialists. REQUIRE reports and submarine specialists are submarine specialists. Reports of submarine specialists are submarine specialists. Reports of submarine specialists are submarine specialists. Reports and submarine specialists. Reports are submarine specialists. Reports and submarine pipeline specialists. Reports and submarine pipeline. Super submarine specialists. Reports and submarine pipeline. Reports and submarine pipeline specialists. Reports and submarine pipeline pipeline specialists. Reports and submarine pipeline pipeli

A. J. Weijburg, Managing Director, LAND AND MARINE CONTRACTORS, LTD., Spital Poad Browney Wiral Cheshire.

PEQUIRED in the Beds. (Hunts. area): TWO RENGINEERS, with particular experience in the series of the

APPOINTMENTS VACANT

A LEADING group of building and civil engineering contractors invite applications from BUILDING AGENTS and GENERAL FOREMEN, for appointments in the Midlands and South West England. The positions are permanent and pensionable, and offer excellent prospects to men well experienced in taking charge of large building contracts, and who are accustomed to working to a very high standard.—Apply in confedence, stating age, experience in detail, and salary required, to Box No. BAS441, A.K. Advertising, 212a Shaltesbury Avenue, London, W.C.S.

PAULING AND COMPANY LTD.

are revising their register of CIVIL ENGINEERING STAFF desirous of taking up overseas appointments. They would welcome hearing from Engineering and Office Staff, also General Foremen, Section Foremen all categories, Foremen/Fitters and Fitters. Those interested should send brief summary of training and experience, together with personal details, such as age, marital status, etc.—Write to

PAULING AND COMPANY, LTD., 26 Victoria Street, London, S.W.1.

CUBITTS REQUIRE a LABORATORY SUPERINTENDENT to take charge of all testing in the soils mechanics laboratory. Previous experience of testing is necessary, and applicants should be able to control and instruct staff. The appointment is a new one and offers excellent scope for advancement.—Please send full details, in confidence, to Personnel Manager (M.6868), HOLLAND & HANNEN AND CUBITTS (GREAT BRITAIN), LTD., 1 Queen Anne's Gate, London, S.W.1.

CUBITTS.—Applications are invited for the position of CIVIL ENGINEERING ESTIMATOR, based on the London head office. Applicants should preferably have experience of tendering for all types of heavy civil engineering construction, but consideration will be given to men who have had site experience but the straining could be given in some circumstances. Please send full details to Personnel Manager (CI/M6863), HOLLAND & HANNEN AND CUBITTS (GREAT BRITAIN), LTD., 1 Queen Anne's Gate, London, S.W.1.

FIRST-CLASS AGENT

REQUIRED for large reinforced concrete superstructure contract in Kent area. A good salary is offered to the right man. Bonus, etc., can be discussed during interview.—Apply in confidence, stating age, experience, and previous employers, to:

Box 1058, c/o MURRAY AND PHELAN, LTD., Columbia House, Aldwych, W.C.2.

MATERIAL ESTIMATING ASSISTANT REQUIRED for a progressive company of building and civil engineering contractors. He snould be capable of extracting from specifications, bills of quantities and drawings, all relevant details for formulating inquirities and or quotations for materials, and able to assist by building-up the material components of costs building-up the material components of costs having the experience required to the cost of the contraction of the cost of t

Mansfeld, Notts.

MECHANICAL MAINTENANCE SUPERVISOR, reporting directly to Plant Superintendent, is
Requilifed for mining operation in relained but shave
extensive experience of workshop practice. But allifed
including heavy construction equipment, and be competent to organise and supervise men. State salary
required and give details of qualifications, experience,
references and other pertinent information in first
letter.—Apply to Box V.4654, "The Contract Journal."

etter.—Apply to Box V.4654, "Ine Contract Journal."

ENIOR AREA AGENT REQUIRED to take charge
of medium-size contracts in an area Berks./Bucks.
Experience in control of several contracts collectable
is the minimum experience required. Generous salary,
car and pension scheme, and considerable scope for
advancement in expanding organisation.—Write, giving
full details of experience, age and salary required, to
Box V.4651, "The Contract Journal."

SENIOR COMPANY AGENT

SENIOR COMPANY AGENT

An expanding company of building contractors REQUIRE a Senior Company Agent to take complete charge of two adjacent flats contracts, totalling a value of over £1m. In a South Coast Industrial area. For the complete responsibility for the performing of the contract, and will act at all times as the personal representative of the board of directors. He must have received an extensive experience in site managerial duties, and his qualifications should include a sound technical, as well as practical, training, and possess drive and ability to manage and plan all possess drive and believe and possess drive and possess d

Managing Director, BOX V.4626, "THE CONTRACT JOURNAL."

SITE ENGINEER, with good prospects of rapid promotion to agent, REQUIRED for major road improvement scheme in Surrey, Quality control of work, measurements, setting out, etc. Youngish man preferred, but minimum of five years' experience with contractors essential. Permanent employment in southern area offered to right man.—Write, with details of age, experience and salary, to NICHOLSON CONSTRUCTION CO., LTD., Freeland House, CHANTIY SURPEYOR.

QUANTITY SURVEYOR. A vacancy occurs for CONTRACTOR'S SURVEYOR of final (or mars final) standard, with experience in reinforced concrete and civil engineering quantities, accounts, claims, et write, stating age, qualifications, experience, salary required and when available, to TILEMAN AND CO. LTD., Rommy House, Tuton Street, London, S.W.1.

RESIDENT ENGINEER REQUIRED Immediately for contract at Enfield, Middlesex, for about særaniles of cast-iron pipeline in trench. Contract period nine months. Salary £1.500 p.a. plus car allowance. Apply before 15th August to J. D. and D. M. Watson, MM.I.C.E., 67 Turtion Street, S.W.I.

APPOINTMENTS VACANT

PLANT HIRE MANAGER WANTED for expanding feet of contractors' plant.—Applications from thoroughly experienced persons to DUDLEY VALE, LTD., 9 Palace Street, London, S.W.1.

LTD., 9 Palace Street, London, S.W.1.

DRITISH LIFT SLAB, LTD, 6 Douglas company)

urgently REQUIRE REINFORCED CONCRETE

ESIGMERS for interesting work, employing progressive design methods, on their revolutionary system of
building construction. This rapidly expanding company
offers excellent prospects of a rewarding career and
offers excellent pro

Road, Birmingham, 43.

MANAGER WANTED for hire department of well-known London plant company. Fully experienced persons only need apply.

Write Box V.4574, "The Contract Journal."

CASHIER AND WAGES CLERKS

REQUIRED for large civil engineering contract in the Doncaster area. Good salary and conditions.—Apply in writing to:

THE MITCHELL CONSTRUCTION CO., LTD., Wearmouth Colliery, Sunderland, Co. Durham.

SITE AGENT REQUIRED for multi-storey flats contract in London area. Must be capable, experienced man. Top salary and conditions for right person. Write Box V.4638, "The Contract Journal."

Write Box V.4638, "The Contract Journal."

SITE MANAGER REQUIRED for large flats scheme
in London area. Successful experience of multistorey construction essential. Best salary and conditions for fully capable man.—Write in confidence to
Box V.4639, "The Contract Journal."

FENCING SPECIALISTS REQUIRE experienced EXECUTIVES, ESTIMATORS, TAKER-OFF SUR-VEYOR.—Write in confidence, quoting experience, and salary expected, to Box V.4637. "The Contract Journal."

MANAGER WANTED for small, busy plant depot, Croydon. Must be able administrator and have engineering training.—DULEY VALE, LTD., 9 Palace Street, London, S.W.1.

MINING AND TECHNICAL SERVICES,

invite applications for the following vacancies within a major group of gold mines operating in Ghana: POWER HOUSE SHIFTSMEN.

UNDERGROUND AND SURFACE

ELECTRICIAND FOREMAN, FITTER

CONTINUOUS CONTRACE. Length of tour—12 months underground personnel, or 15 months surface personnel, with three months leave on full pay. Free passages, accommodation and medical attention: details of qualifications and experience, should be addressed to:

c/o WALTER SKINNER, LTD., 20 Copthail Avenue, London, E.C.2.

WORKING CHARGEHAND STEEL ERECTOR
WANTED. With fabricating experience. Permanency. Modern house available.—FRED. WATKINS.
LTD., Coletord, Glos.

QUANTITY SURVEYORS.—Good opportunity for keen young Surveyor, to work on own initiative, in Mid-Kent area, on building and civil engineering work, valuations, taking-off, etc. Superannuation and transport. — Write Eox V.4636, "The Contract

Estimator and surveyor required by Mid-experienced in pricing contractors. Applicant must be experienced in pricing and pricing must be applicated in pricing must be applicated in pricing and pricing materials, dealing with correspondence of the contractors, and pieceworkers. — Write, giving full particulars of past experience, present position, and salary required, to Box V.4640, "The Contract journal."

Journal."

J'RST-CLASS AGENT REQUIRED for large reinforced concrete superstructure contract in Oxfordshire area. Good salary offered to the right man. Bonus, etc., can be discussed during interview.—Write, in confidence, stating age, experience and previous employers, to Box 1061, c/o Murray and Phelan, Ltd., Collamba House, Aldworth, W.C.Z.

EXPERIENCED AGENT, preferably qualified, REQUIRED immediately by civil engineering contractors on Tyneside.—Apoly, in confidence, to Chief Engineer, BRIMS AND CO., LTD., Pandon Buildings, Newcastle upon Tyne.

STOREKEEPER REQUIRED for nuclear power station contract. Must have experience with civil engineering mechanical plant spares. Hostel accommodation available, if required.—Applications, in writing, should be submitted to the AGENT. TAYLOR WOODROW CONSTRUCTION, LTD., Sizewell Nuclear Power Station, near Leiston, Suffolk.

For Advertisements received too late for classification see page 685

APPOINTMENTS WANTED

S ENIOR ESTIMATOR DESIRES CHANGE. Wride experience of building and civil engineering. Good class work. Write Box W.4544, "The Contract Journal."

Write Box W.4544, "The Contract Journal."

PLANT HIRE MANAGER, late 20s, SEEKS NEW POST, preferably in Kent. Current car licence. Minimum salary £850 per annum. Write Box W.4628, "The Contract Journal."

CHIEF A CCOUNTANT (Qualified) and/or COMPANY SECRETARY, many years' experience in building and civil engineering industries DESIRES APPOINTMENT In London or the south. Final, costs and management accounts, budgetry control, administration of the country of the countr

write Box W.4627, "The Contract Journal."

Cashler Office Manager, aged 38, experienced ayworks and contract accounts, costing, buying, wages/P.A.Y.E., DESIRES JOB in Manchester area, Write Box W.4644, "The Contract Journal."

SURVEYS

SUPPLEMENT

AND SETTING OUT

ESTATES, MOTORWAYS ROADS AND CITY DEVELOPMENT AREAS

THE SITE SURVEY COMPANY LONDON, S.E.3

TELEPHONE LEE Green 7444

WORK REQUIRED

SITE CLEARANCE, BULK EXCAVATION
JANES AND CO., LTD., Trading Estate, Slough
Telephone: Slough 20361—Ext. 4.

Telephone: Slouph 20361—Ext. 4.

CONTROLLED EXPLOSIVES, LTD., specialise in the fragmentation of mass and reinforced concrete inside or outside buildings. Demolition of bridges and chimneys, mass rock, trenching, sewage beds engine beds, etc. and deep drilling for quarries Particulars from 11 Church Street, Oldbury, Birming ham. Tel.: BROSadwell 3117, Blackheath 1996 & 1783.

THE CLEARANCE CO., LTD., Specialists in remove of trees and roots. Explosion Engineers and Demolition Contractors.—Delph Dene, Quarry Lane Appleton, Warrington, Telephone: Stockton Heath 309 Appleton, Warrington. Telephone: Stockton Heath 309

EXCAVATION SUB-CONTRACTS. Technical star
available to analyse programme or complex projects. Particular settlention of the complex projects. Particular settlention of the complex projects. Loading Showles and Total scraperas Excustors. Loading Showles and Lorries available with competent and imaginative supervision or execution of work.—DICK HAMPTON, Broadview Farm, Blacknest, Alton, Hants. Tel.: Bentley 3241.

Farm, Blacknest, Alton, Hants. Tel.: Bentley 324 T.

F GRADING, SEEDING, TURFING and PLANTING I form part of your CONTRACT, we will be pleased to the part of your CONTRACT, we will be pleased to the place of the p

DEMOLITION, SITE EXCAVATIONS, PLANT HIRE. Hardcore supplied.—D. W. STONE, LTD., 2 St. Leonards Road, Hove. Tel.: Hove 46396.

WANTED, EXCAVATION, SITE CLEARANCE and DEMOLITION WORK.
R. BARKER (PECKHAM), LTD., New Cross 3337 BULK EXCAVATIONS and SITE WORKS under-taken. Direct or on SUB-CONTRACT besides Quotations given for large or small contracts ny-where.—S. AND L. BULL BROS., LTD., 126A High Street, Winchester. Telephone: Winchester 2264.

DROTT 8TD6, fitted Winch and Priestman Cub Vs. HIRE or CONTRACT WORK.—JAMES COOPER. LTD., 28 Kensington Church Street, London, W.B. WEStern 3412.

OVERSITE PREPARATION AND COMPACTION With MODERN MACHINES.—Write or 'phone: SAM BOOTH, LTD., 75 Victoria Street, London, Telephone: Sullivan 3791 and Haywards Heath 1126.

Pelephone: Sullivan 3791 and Haywards Heath 1126.

BULK EXCAVATIONS. any quantity quoted for Own plant and forries.

COFF AND SON (EXCAVATIONS). LTD..

Buckhurst Hill, Geepble, Sacot, Berks.

Ascot 292/7/8.

ERECTION and DISMANTLING.—Structural Steelwork and all types of Prelabricated Components. Speedy and efficient service.—ERECTORS, 80 Bulweil Crescent, Cheshunt, Herts. Waltham Cross 22584.

SITE CLEARANCE, EXCAVATIONS, ROADS, SEWERS, etc.—COFFEY AND SON, LTD., 147 Rushey Green, Catford, S.E., Hither Green 5667.

WANTED, HIRE or CONTRACT WORK for modern fleet of Caterolliar 631 Motor Scrapers, D98, 15 cu. yd. Rear Dump Euclids and 38RB Faceshovel.—Apply: BRODERICK AND RYAM, LTD., 421 Nottingham Road, likeston, Derbys, Tel. 4381/2/3.

HIGHWAY CONTRACTORS, LTD., invite inquiries

Derbys, or phone likesion warver.

BULK EARTHMOVING, direct contract or subcontract. Also BULLDOZERS and SCRAPERS

OF HIRE.—FRANK R. WALPOLE, LTD., 126 Wing

Road, Leighton Buzzard, Beds. Leighton Buzzard 3351

SOILING, SEEDING and FURFING. Site Clearance, Excavation and Levelling Work undertaken in any part of the U.K. at competitive prices.—GILLIAM. Purley. UPlands 9222/6.

Puriev, UPlands 9222/6.

BULK EARTHMOVING, OVERBURDEN STRIPPING, EXCAVATIONS for roads, airfields, etc., with Euclid TS24 Motorised Scrapers and Caterpillar D8 Tractors and Scrapers able to undertake work anywhere in the country. Also PLANT available for HIRE. CONTRACTORS PLAN HIRING CO., LTD., Barkby CONTRACTORS PLAN HIRING CO., LTD., Barkby CONTRACTORS, PLAN HIRING CO., LTD., Barkby CANTRACTORS, PLAN HIRING CO., LTD., Barkby CONTRACTORS, PLAN HIRING CO., LTD., Barkby CONTRACTORS, PLAN HIRING CO., LTD., Barkby CONTRACTORS, PLAN HIRING CO., LTD., BARKDY CONTRACTORS, PORTING CO., LTD., BARKDY CONTRACTORS, PORTING CO., LTD.,
AGENCIES

S PECIALISED PRECAST CONCRETE WORK REQUIRED in Midland and North West areas. Supplied ex works or delivered. Prompt attention. Please write to Box P.N.714, "The Contract Journal."

Expanding plant hire company wish to negotiate sound AGENCIES. Fully equipped workshops and substantial office accommodation available to give full backing to these.

Write Box X.4516, "The Contract Journal,"

SALES BY TENDER

NORTH OF SCOTLAND

SURPLUS MATERIALS.

OFFERS are invited for the FOLLOWING SURPLUS
MATERIALS which are in store at TUMMEL BRIDGE.

Pitlochy:

B.R.C. Fabric Mesh No. 61—5,218 sq. yd.
P.V.C. Water Stop. 6in. Type E—1,680 lin. ft.

3-din. thick Flexcel Fibreboard—3,040 sq. ft.
Offers should be addressed to SIR ALEXANDER
GIBB AND PARTNERS, 43 Northumberland Street,
Edinburgh, and delivered there not later than
MONDAY, 21st August, 1961.
The materials may be inspected at Tummel Bridge,
and in this connection, the telephone number of our
Resident Engineer is DALWHINNY 221.

POPLAR BOROUGH COUNCIL.

The above Council have for DISPOSAL SUNDRY PLANT. EQUIPMENT and MACHINERY no longer required in the Baths and Washhouses Department. This includes Electric Motors, Washing Machines, Slipper Baths, etc.
Full particulars and Tender Forms can be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3 (ADVance 4414, Ext. 202). Offers must be received by the TOWN CLERK not later than 7 p.m. on WEDNESDAY, 30th August, 1961.

GREAT OUSE RIVER BOARD. SALE BY TENDER.

TENDERS are invited for the PURCHASE of the FOLLOWING:

TENDERS are invited for the PURCHASE of the FOLLOWING:

(a) Simplex 20 28-h.p. 212-ton 24in. gauge Locomotive. by Motor Rail, fitted with Dorman 2DWD Diesel Engine and Driver's Cab. No. 9778.

(b) Allen Model TS Motor Scythe, 3ft. cutting mechanism. with Villiers 147 c.c. engine. Motor Scythe, 3ft. cutting mechanism. with Villiers 167 c.c. engine. No. 10572.

(c) Ditto. No. 97324.

(d) Danarm Model DD8F Chain Saw, with Villiers 98 c.c. engine. No. DD8F2. 8:334.

(e) Rapier 112in. Centrifugal Pump, with J.A.P. 114-h.p. engine. No. 16982.

(g) Wickham 112in. Lift and Force Diaphragm Pump, with J.A.P. 1-h.p. engine. No. 620.

(h) Winget Model STHR 7:5 cu. ft. Concrete Mixer, with Petter 5-h.p. Diesel engine. No. STHR 57 PDble for inspection on and after 9th August at the Board's Depot, Ely. Cambs. Forms of Tender and Permission to View may be obtained from the Engineer to the Board, at the address below.

Tenders, in the envelope provided, addressed to the Clerk of the Board, should be delivered by 9 a.m., MONDAY, 21st August. 1961.

Elmhurst, Roodvlands Avenue,

Elmhurst, Brooklands Avenue, Cambridge, 2nd August, 1961.

INVENTIONS

NDUSTRIAL ENGINEERS OF REPUTE invite in strict confidence, DETAILS of INVENTIONS, ith object of manufacturing and world distribution. Write Box K.L.S17. "The Contract journal." INDUSTRIAL

BUSINESSES-SALE OR WANTED

PRIVATE BUYER wishes to ACQUIRE PLANT HIRE BUSINESS in Home Counties area. Capital available. Write Box X.4541, "The Contract Journal."

FINANCE

LIMESTONE QUARRY, West Gloucestershire, engaged in the production of road materials, aggregates, etc., REQUIRES ADDITIONAL CAPITAL £12,000-£15,000. Amounts secured by issue of Preference or Ordinary Shares.
Write Box X.4509, "The Contract Journal."

ACCOMMODATION

FOR HIRE, all types of CARAVANS available.

FUsual amenities. From 40/- per week. Delivered anywhere.—CATERHAM CARAVAN CENTRE, LTD, The A.22 Roundabout, Godstone Road, Whyteleafe, Surrey. Telephone: Upper Warlingham 3590/3607.

CARAVANS TO RENT for men with ramilies. CARAVANS TO RENT 67 per month. Delivery anywhere LANDSMAN'S SERVICES.

Buckden Huntingdonshire. Telephone: Buckden 287

Buckéen Huntingdonshire. Teleshone: Buckéen 287

A CCOMMODATE YOUR EMPLOYEES in a 4-berth CARAVAN, fully equipped with heating, lighting, cooking and washing facilities. Hire rates from 500 per week for four persons. Also MOBILE OFFICES. Delivered anywhere. — NORTHERN CARAVAN DISTRIBUTORS, Handforth, Chos. Tel.: Mercury 4255/6.

PROFESSIONAL SERVICES

SETTING-OUT ENGINEERS and LAND SURVEYORS
Supplied with Idil equipment and transport to work
singly or in teams in ANY PART OF THE WORLD.
Motorways, multi-storey works, tunnels, route
location, baselines, precise levels machine letting.
PRECISE SURVEYS, LTD. — Worcester 27584.

precise levels, machine setting. PRECISE SURVEYS, LTD. — Worcester 27584.

AN INTERNATIONAL ORGANISATION offer for as the setting of the sett

FULLER HORSEY

AUCTIONEERS AND VALUERS OF

> PLANT, MACHINERY AND FACTORIES

Since 1807 10 LLOYDS AVENUE

LONDON E.C.8 TELEPHONE: ROYAL 4861

SALE BY AUCTION

By Order of the Secretary of State for War,

E

MESSRS.

FULLER, HORSEY SONS AND CASSELL
have been instructed to offer for SALE by
AUCTION in Lots at the ROYAL ARSENAL
WOOLWICH, LONDON, S.E.18, on TUESDAY, 28th
AUGUST, 1961, and the following days at 10.30 am
precisely each day

ST, 1961, and the following days at 10.30 precisely each day
ENGINEERS' MACHINE TOOLS, INDUSTRIAL EQUIPMENT AND SURPLUS STORES

INDUSTRIAL EQUIPMENT AND
SURPLUS STORES
— including
—

DIVERS and FROGMEN at immediate notice.
DIVING SPECIALISTS, LTD., Dartford 24139.
Night—Farningham 2452.

RED AND MALLIK, LTD., Civil Engineering Contractors (Diving Division), Milford Manor, satisbury, Wiltshire. Telephone \$141.

Contractors (Diving Division), Milliora Maior, Saisburv. Willishire. Telephone 5141.

FOR YOUR UNDERWATER WORK, contact he FOLLOWING MEMBERS of the ASSOCIATION OF UNDERWATER CONTRACTORS:—Conroy Lewis, Ltd., Southamston—Southampton 56578.

Diving Specialists, Ltd., Dartford—Dartford 24138.

Diversal Divers, Ltd., Whitby — Whitby 598.

A 1 paraloe, Brighton—Brighton 61228.

Underwater Welders and Repairers, Ltd., Cardiff—Cardiff 29631.

Universal Divers, Ltd., Liverpool—Liverpool Cent. 426.

The Association of Underwater Contractors, London—Gerrard 0328.

HORTICULTURAL

TURFING — SEEDING — HEDGING Quotations for all branches of landscape work. anywhere in the U.K. C.E. contracts a speciality WEBSTER BROS., of Horsforth, Leeds. Tel. 2364.

WEBSTER BROS., of Horsforth, Leeds. Tel. 2584.

TURYES.—Machine-cut. 3ft. x 1ft., close mom, weed-treated, 60/- per 100. Keen trade risks we would be pleased to quote for your leveling law weed-treated, 60/- per 100. Keen trade risks we would be pleased to quote for your leveling law weed to provide the provided to the provided risks well as the provided to the provided risks with the pr

EDWARD GAIT CONSTRUCTION, LTD., 174 Park
Road, Kingston, Surrey (Tel. 9382). All types
of Horticultural and Sportsground work undertaken
Ferguson Tractors and Emulsion Sprayers for HIKE

Ferguson Tractors and Emulsion Sprayers for HIRE.

OR S A L E.
20,000 cu. yd. TOPSOIL, ex Nursery (very good).
Reading area.
20,000 cu. yd. TOPSOIL (good). Aldershot area.
20,000 cu. yd. FILLING-Sandy Loam. Guildiofd.
Aldershot area.
20,000 cu. yd. FILLING-Sandy Loam. Guildiofd.
Aldershot area.
20,000 cu. yd. FILLING-Sandy Loam. Guildiofd.
Aldershot good and the compact of the c

FOR SALE, TURVES, old meadow, 3 x 1, week treated, cut by the latest American machine Gardening done. Farmyard Manure surphied. Rubbible removed.—MOYO TURFING CO.. PURING CO.. SURPhiem Additional Co. Turking Co.. Turking Co.. Surphiem Additional Co. Turking Co.. Surphiem Additional Co. Turking Co.. Surphiem Additional Co. Surphiem Co. Surphi

One **Sumo Minor** takes over from the Fire Brigade



Until a SUMO Minor drainage pump arrived on the scene, the cellar of an old people's home near Brighton kept the fire brigade on duty day and night. Heavy winter rain had created an artesian pressure which ruptured the cellar floor. The water level rose quickly to 4 feet, putting the central heating boiler out of action, and threatening the electrical control boxes. The fire brigade were in action continuously until the SUMO took over and pumped the cellar dry, thereby releasing the firemen for their normal duties. The SUMO Minor has a 2" outlet, is 2'2" high, 75" in diameter and weighs 93lb. Capacity depends on the head: 6000 g.p.h. at 30ft., 3000 g.p.h. at 50ft. It will work without overheating on any A.C. supply between 110 and 550V.



notice. 24139.

act the 56578. 24139. y 598.

24-hour Counties-less Lane.) 51000.

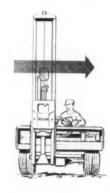
SUMO PUMPS LTD.

SCHOMBERG HOUSE, 82, PALL MALL, LONDON S.W.1 TEL: TRAFALGAR 1954

The ARROW Side-Action

Mobile Hydraulic Hammer

POST AND PILE DRIVING





FOR DETAILS OF THIS MACHINE, ENTIRELY NEW TO EUROPE, WRITE TO THE

Sole agents for the United Kingdom and Eire

LEMAND MACHINERY LTD. Rowsley, Matlock, Derbyshire

Telephone Darley Dale 3393

INDEX TO ADVERTISERS

	Page
A	
Abelson & Co. (Engineers), Ltd	.728 iiib .656 .652 .710 .727 .716 .728
В	
Bamford, J. C., (Excavators), Ltd.	
Barfords of Belton, Ltd vii Barking Developments Co., Ltd. Benford, Ltd. Benford, Ltd. Blaw Knox, Ltd. Bowmaker (Plant), Ltd. Branch, Jack, (London) Brent, John, & Co. (Shipbrokers), Ltd. British Reinforced Concrete Engineering Ltd. Cove British Wagon Co., Ltd. Brown, David, Tractors (Sales), Ltd. Brown, Tawse Plant, Ltd.	i, ix .730 ivb iia .xiia .714 .651 Co., r iv vb
C	
Campbell-Gray, Ltd. Chadburns (Liverpool), Ltd. Chamberlain Plant, Ltd. Carkson, A., & Co., Ltd. Cohen, George, Sons & Co., Ltd. Conlin, B. E. Contractors & Industrial Equipment, Ltd. Cox and Danks, Ltd. Cox, H., & Sons (Plant Hire), Ltd. Cripps, R., & Co., Ltd. Cov. Cubitts, Fitzpatrick, Shand	660 654 657 652 714 659 672 651 er ii
D	
Dawson, W. A., Ltd. Diving Specialists, Ltd. Dorman Long & Co. (Steel), Ltd. Duke & Ockenden, Ltd. Dunlop Rubber Co., Ltd.	714 686 732

	Page
E	
Edmunds, G. M., Ltd	658
F	
Firestone Tyre & Rubber Co., Ltd. Ford Motor Co., Ltd. Foster, Arthur, (East Ham), Ltd.	Xi 649 728
G	
Gazeway Plant Hire, Ltd. General Roadwork, Ltd. Greenham Equipments, Ltd. Greenham Group	726
н	
Hardun & Sons, Ltd	via
J	
Johnson, C. H., (Machinery), Ltd Joy-Sullivan, Ltd	655
L	
Lemand Machinery, Ltd	3, 730
M	
Mabey & Johnson, Ltd. Marshall, Sons & Co., Ltd. M.E. Engineering, Ltd. Michigan (Great Britain), Ltd. Moseley, David, & Sons, Ltd.	x 715
N	
Neagron Construction, Ltd.	715
0	
O'Brian, F., & Co., Ltd	656
•	
Palmer, G. J., & Sons Pearson Machine Tool Co., Ltd. Peel, H., Ltd. Philips Electrical, Ltd.	653

	P
	Phoenix Engineering Co., Ltd. 658 Pike, George, Ltd. 713 Powell Duffryn Engineering Co., Ltd. 673 Priestman Bros., Ltd. vib Public Works Productions (Coventry), Ltd. 652 Pumpire, Ltd. 654
	R
	Roads & Runways (Plant Hire), Ltd. 715, 728 Rylands Bros., Ltdxii
	S
The state of the s	Saunders, A. J., (Tractors), Ltd. 712 Saunders, H. A., Ltd. iva, va Saville (Tractors), Ltd. 715 Scotney, Tom M., Ltd. 715 Sheehy, Mark, Ltd. 655 Simon, Richard, & Sons iii Smith, John, & Co. (London), Ltd. Cover iii Sparrow, G. W., & Sons, Ltd. 714 Stanton & Staveley Sales, Ltd. xia Steel Fabricators (Cardiff), Ltd. viiia, ixa Stothert & Pitt, Ltd. 650 Sumo Pumps, Ltd. 683 Symes (Plant Sales), Ltd. 726
	T
-	Tarmac Roadstone, Ltd. viiib Thorn, J., & Sons, Ltd. 731 Thwaites Engineering Co., Ltd. vii Trist, Hubert H. P., & Co., Ltd. 672
	U
-	Under Water Welders and Repairers, Ltd. 716 United Dominions Trust, Ltd
	v
	Val De Travers Asphalte, Ltd
	W
-	Ward, Thos. W., Ltd

Advertisements received too late for Classification

GLOUCESTERSHIRE COUNTY COUNCIL. LONDON-FISHGUARD TRUNK ROAD, A.40-

TENDERS are invited for the ABOVE WORKS, situated approx. 3 miles west of Burlord on the situated approx. 3 miles west of Burlord on the present of the situated approx. 3 miles west of Burlord on the present of the situated approx. 3 miles west of Burlord on the situated approx. 4 miles west of Burlord on the situated and situated concrete Foundations, Graite Sett Kerbing and Bitumen Surfacing. The situated and fenced. The situated approx. 4 miles were situated and sence of the situated approx. 4 miles and situated approx. 4 miles and situated approx. 4 miles and situated approx. 4 miles a

GUY H. DAVIS. Clerk of the Council.

ROYAL BOROUGH OF NEW WINDSOR. CLEWER DEDWORTH SURFACE WATER SEWER.

TENDERS are invited for the CONSTRUCTION of approx. 692 lin. yd. of 24in. and 27in. dia. SULPHATE RESISTING SPUN CONCRETE PIPE SEWERS, and incidental word protestainable from the Borough Engineer, Particular Protestainable from the Borough Engineer, Ripling Mimorial Building, Alma Road, Windsor, and Tenders, in the official envelope provided, must reach me by Noon on FRIDAY, 25th August, 1961.

G. N. WALDRAM.

CATERHAM AND WARLINGHAM URBAN

CONSTRUCTION OF A SURFACE WATER

TENDERS are invited for the CONSTRUCTION of a SURFACE WATER SOAKAWAY in BOND ROAD, warlingham. The Soakaway is be 5ft. Internal diameter and 40ft. deep, Lined with Precast Concrete Rigs. Grantities may be obtained from the Engineer and Surveyor. Council Offices, Caterham, and must be returned to the undersigned in the endorsed envelope provided not later than 12 Noon on MONDAY, 4th September, 1961.

B. J. SMERDON.

B. J. SMERDON, Clerk of the Council.

Council Offices, Caterham, Surrey.

STAINES URBAN DISTRICT COUNCIL.

HIGHWAYS ACT. 1959.

PARK AVENUE.

FIXED-PRICE TEMBERS are invited for the MAKING-UP of PARK AVENUE.

The works comprise the following approx, quantities plus ancillary works: Excavation 480 cu. yd.; Gravel plus ancillary works: Excavation 480 cu. yd.; Gravel Asphalt Carriageway with a construction of the construction o

STAINES URBAN DISTRICT COUNCIL.

LIGHTING, 1961-62.

FIXED-PRICE TENDERS are invited for the SUPPLY, FITTING and ERECTION of 190 Group A STEEL COLUMNS, together with Gear, Lanterns, Lamps, etc., together with Harden, 190 Group B STEEL COLUMNS, with Lanterns, Lamps, etc., with 100/150-watt Tungsten Lighting; and the RESITING of some existing CAST-IRON COLUMNS with the Provision of New Lanterns and Cast-iron Timeswitch Boxes.

Provision of New Lanterns and Cast-iron Timeswitch
Boxes.

Copies of the Specification, Bills of Quantities and
Form of Tender may be obtained from the Engineer
and Surveyor, Shortwood Houst of Cast of Cast
of Cast of Cast
of Cast of Cast
of Cast of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast
of Cast

F. ENTWISTLE, Clerk of the Council.

DEARNE URBAN DISTRICT COUNCIL. ERECTION OF AGED PERSONS' RETREATS.

FIXED-PPICE TEMDERS are invited for the ERECTION of AGED PERSONS RETREATS at GOLDTHORE and THURNSCOE.

Documents and Forms of Tender are obtainable from the Engineer and Surveyor, Council Offices, Bolton-on-Dearne, on payment of £2 2s. deposit, returnable on receipt of a bona-fide Tender or the return of all documents and Tender or the return of all documents are the present of the persons of

C. BISHOP, Clerk to the Council.

Council Offices, Station Road, Bolton-on-Dearne, Near Rotherham.

Near Rothernam.

Contract in London. Previous experience essential. Write Box V.4652. "The Contract Journal."

SETTING OUT ENGINEER REQUIRED for tunnel work in the London area. Must have previous experience.—Write Box V.4661. "The Contract Journal."

HAMPSHIRE COUNTY COUNCIL. HERTFORDSHIRE COUNTY COUNCIL. ROADS AND BRIDGES DEPARTMENT.

STREET LIGHTING.

ROAD TR.A.303—JUNCTION TR.A.34-BULLINGTON ROUNDABOUT,

TENDERS are invited for the SUPPLY and ERECTION of 13 35ft. STEEL LIGHTING COLUMNS, complete with 200-W or 280-W Sodium Lanterns and accessories, at the above Roundabout.

Applications for Contract documents must reach the County Surveyor, The Castle, Winchester, not later than Noon, 31st August, 1961.

H. N. JENNER, County Surveyor.

The Castle, Winchester, Hants. August, 1961.

OF BOROUGH BACUP.

HOT ROLLED ASPHALT SURFACING.

TENDERS are invited for the LAYING of approx.

1.000 sq. vd. SINGLE COURSE and TWO COURSE
PATCHING HOT ROLLED ASPHALT ON NEWCHURCH
ROAD, A.681.

ROAD, A.681.

Specification, Billi of Quantities and Form of Tender may be obtained from the Borough Engineer, Stubbylee Hall, Bacup.

Tenders, on the prescribed form, must be delivered to the undersigned, in plain sealed envelopes endorsed "Hot Rolled Asphalt Surfacing," not later than Noon on MONDAY, 21st August, 1961.

A. D. BOND, Town Clerk.

Stubbylee Hall,

BROADSTAIRS AND ST. PETER'S

INVITATION TO TENDER.

DUMPTON GAP TO LOUISA BAY-

The Council invite TENDERS for the CONSTRUC-TION of approx. 300 lin. yd. of MASS CONCRETE and BLOCKWORK CLIFF PROTECTION WALL with a Keinfowde Berm at rear: 16 Mass Concrete Buttresses: Reinfowde Concrete Beams: together with all incidental works.

Reinforced Concrete Beams; together with all incidental works.

Drawings may be seen at, and Tender documents obtained from, the Office of the Engineer and Surveyor, Pierremont Hall, High Street, Broadstairs, Kent, in payment of a deposit of Two Pounds which will return of all documents. In the Control of the Sender and the return of all documents. Tenders, in plain sealed envelopes endorsed "Cliff Protection Works," and bearing no mark or indication of the sender, must be delivered to me not later than Noon on FRIDAY, 8th September, 1961.

The Council do not bind themselves to accept the lowest or any other Tender.

Pierremont Hall, Broadstairs, Kent. August, 1961.

DOCKING RURAL DISTRICT COUNCIL. BURNHAM MARKET SEWERAGE AND

FIXED-PRICE TENDERS are invited from experienced public works contractors for the CONSTRUCTION of a SYSTEM OF SEWERAGE and a Sewage Disposal Works at Burnham Market, King's Lynn, Norfolk.

enced public works contractors for the CONSTRUCTION of a SYSTEM OF SEWERAGE and a Sewage Disposal Works at Burnham Market, King's Lynn, NOTOLK.

NTOLK.

TOOK.

TOOK AND THE SEWERS AND TH

contractor. Tenders, made out on the form provided in the Contract documents, and accompanied by the Quantities priced in ink, must be enclosed in a plain sealed envelope endorsed "Tender—Burnham Market Sewerage Scheme," and delivered to the undersigned not later than Noon on SATURDAY, the 16th September, 1961.

envelope enours age Scheme," and delivered to age Scheme," and delivered to later than Noon on SATURDAY, the 16th September 1961.

The lowest or any Tender will not necessarily accepted, and the work will be subject to the fin approval of the Minister of Housing and Local Government after submission of an estimate based on provisionally accepted Tender.

J. H. MARSHALL,

Clerk of the Council.

Council Offices, Station Road, Docking, King's Lynn, Norfolk.

Nortolk.
August, 1961.

CIVIL ENGINEERING ASSISTANT REQUIRED Immediately at Lancaster and Preston for reinforced and mass concrete service reservoir work.
Applicants should be 20-23 years of age and have experience in setting out, etc., and the use of instruments.—Please apply, in writing, stating experience, age and salary required, to Secretary, R. AND T. HOWARTH, LTD., Crossfield Works, Rochdale.

DESIGN ENGINEER WANTED for Victoria head office of civil engineering contractor. Should have experience of site work and mechanical equipment. Reply to Box V.4656, "The Contract Journal," quoting Ref. ABC/12.

HIGHWAYS DEPARTMENT.

APPLICATIONS are invited for the FOLLOWING
APPOINTMENTS:

(a) Assistant Engineer A.P.T. (4)

APPLICATIONS are invited for the FOLLOWING APPOINTMENTS:—

(a) Assistant Engineer, A.P.T. IV-V (£1,140-£1,480 per annum).

(b) Engineering Assistant, A.P.T. IV (£1,140-£1,140 per annum).

(c) Engineering Assistant, A.P.T. III (£960-£1,140 per annum).

(d) Quantity Surveyor, A.P.T. III (£960-£1,140 per annum).

In the case of appointments ansistant, A.P.T. ///lilitation in the case of appointments utransfer to Grades II or III will not be effected until requisite qualifications and experience have been obtained. Opportunity will be given for galning experience in Divisional Surveyors' offices.

(d) Grades of appointments of the company of the c

CHELMSFORD BOROUGH AND RURAL DISTRICT JOINT SEWERAGE COMMITTEE.

CLERK OF WORKS. SALARY £15 155. PER WEEK.

APPLICATIONS

APPLICATIONS

APPLICATIONS

APPLICATIONS

APPLICATIONS

APPLICATIONS

APPLICATIONS

APPLICATIONS

For invited for the ABOVE

APPOINTMENT in connection with the construction, by Contract, of extensions to the Brookend Sewage Disposal Works.

Further details are obtainable from the Surveyor to the Committee, MR. E. P. ALLEN, A.M.I.C.E., M.I.Mun.E., Municipal Offices, Coval Lane, Chelmsford, Essex.

Closing date, 31st AUGUST, 1961.

B. A. FRANCIS, Clerk to the Joint Sewerage Committee.

Municipal Offices, Chelmsford, August, 1961.

OF MANCHESTER.

TENDERS invited for ALTERATIONS and EXTENSIONS to form MILES PLATTING GIRLS SECONDARY SCHOOL. Bill of Quantities from the CITY ARCHITECT, P.O. Box 488, Town Hall, Tenders returnable by AUGUST 23rd.

CITY OF WORCESTER.

WORCESTER.

ERECTION OF 156 DWELLINGS-WARNDON ESTATE.

TENDERS are invited for the ERECTION of THESE OWELLINGS, comprising Traditional Brick-built Three-storey Blocks of the Section and Two-bedroom Flats. Documents of the Section of City Engineer and Surveyor, 22 Bridge Street, Word City Engineer and Surveyor, 22 Bridge Street, Word City Engineer and Office Guineas (cheques payable to Word City), which will be refunded after receipt of a bona-fide Tender and the return of tender documents. Tenders to be posted to the Town Cierk to arrive not later than MONDAY, 18th September, 1961.

BERTRAM WEBSTER.

Giuldhall, Worcester

ALFRETON URBAN DISTRICT COUNCIL. HEATING AND PLANING OF CARRIAGEWAYS.

TENDERS are invited for the HEATING and PLANING of approximately 23,000 sq. yd. of CARRIAGEMY in the LFRETON URBAN DISTRICT Forms of Tender and Schedule of Works may be obtained from the Surveyor, Council Offices, Nottingham Road, Alfreton.

Tenders, in plain envelopes marked "Heating and Planing," should be addressed to the undersigned, and must be received by 26th AUGUST, 1961.

H. TAYLOR, Clerk of the Council.

Council Offices, Nottingham Road, Alfreton, Derbys.

COUNTY BOROUGH OF

The PUBLIC WORKS AND ESTATES COMMITTEE have the FOLLOWING VEHICLES for SALE:—
Ferguson Tractor, GUKA21, 1949.
Ferguson Tractor, HUK696, 1950.
Ferguson Tractor, HUK696, 1950.
Ferguson Tractor, HUK696, 1950.
Ferguson Tractor, HUK696, 1950.
Morris 3-ton Lorry, KUK577, 1953.
Morris 3-ton Lorry, KUK577, 1953.
These vehicles are in working condition, and can be inspected at School Street Depot, Wolverhampton, Offers, in writing, to the BOROUGH ENGINEER.
Town Hall, Wolverhampton.

4th Adusts, 1361.

A PPLICATIONS are invited from qualified BUILDERS interested in MASONRY SUB-CONTRACT in CORNWALL. Work consists of approx. 600 cu. yd. random rubble masonry and anciliary works.—Please Contract of the Contract Contract of the Contract Co

Gent/Building Manager.—An interesting and progressive post with an established building company in Guernsey is available for a man aged under 45. of suitable ability. He must be fully conversant with reinforced concrete structures and general building practice, and be able to estimate, and be responsible for contracts up to final account.—Apply, in writing, to GUERNSEY CONTRACTORS, LTD., Bulwer Avenue, St. Sampson's, Guernsey, C.I.

Bulwer Avenue, St. Sampson's, Guernsey, C.I.

CIVIL ENGINEERING AND BUILDING CONSTRUCTION AGENTS REQUIRED for contracts throughout the British Isles. Applicants should be qualified technically, with broad experience of major and medium-sized contracts, and capable of handling all aspects of contract management. Excellent prospects with pension and life assurance schemes in operation. Apply, in writing, stating age, qualifications, salary required, and giving details of experience, to S. L. (CONTRACTORS). Services, Contractors, Schemes and Birmingham, 23.

MIXCONCRETE, LTD., REQUIRE experient READY MIXED CONCRETE MANAGER their plant at Bristol. Local man preferred.—Pie write, stating age, experience and salary requir to Mixconcrete, Ltd., Billing, Northampton.

SUPPLEMENT

SAFETY-RAIL FENDERS

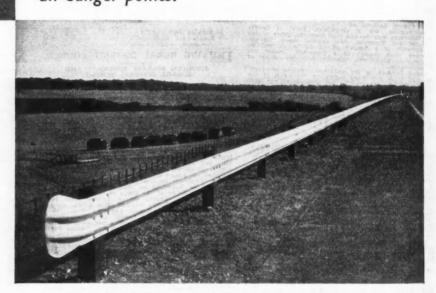


Safety-rail fenders provide maximum protection for the motorist on high speed motorways.

A safeguard to life and property at all danger points.

Photographs show
Safety-rail fenders
erected on the
LONDON—
BIRMINGHAM
MOTORWAY

Photographs by courtesy of John Laing and Son Limited



DORMAN LONG (STEEL) LIMITED, AYRTON ROLLING MILLS, MIDDLESBROUGH

Branch Offices
LONDON, BELFAST, BIRMINGHAM, BRISTOL, GLASGOW, LEEDS
MANCHESTER, NEWCASTLE AND NOTTINGHAM

DORMAN LONG

THE

CONTRACT JOURNAL

INCORPORATING

THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

THE CONTRACT JOURNAL

THE BRITISH CONSTRUCTIONAL ENGINEER
and
THE CONTRACTOR
Established 1879

No. 4,285 Vol. CLXXXII August 10, 1961

Editor: LAWRENCE McCARTHY

PRINCIPAL CONTENTS

P	AGE
OH mander or street street mines title	688
John Sumner's Notebook	690
Unusual Timber Shell Roof at Dorset Holiday Camp, Hyperbolic Para- boloid Spans 88ft.	691
Late Construction News	692
Loch Awe Hydro Scheme, Contract for Cruachan Underground Station	692
I.C.O.S. Civil Engineering Technique, Services Offered by U.K. Company	693
Leicestershire Quarry Reconstruction Trebles Production	
Payments for Variations, Motorway Contractor Attacks Ministry's System	
Talking of Safety, by "Dragee"	696
In Parliament	696
Perth Redevelopment, St. John's Square Scheme Opened	697
Men and Movements	698
Trends of the Cement Industry in Europe	
Air Conditioning at London Computor Centre	699
Trade and Company News	700
CURRENT CONSTRUCTIONAL ACTIVITIES:	
Projects	702
Contracts	704

Publishers

Awards 708

The Contract Journal Co., Ltd., 32 Southwark Bridge Road, London, S.E.1, Telephone: Waterloo 3411 (7 lines). Telegrams: "Seejasir," Sedist, London.

Subscriptions

"The Contract Journal" can be supplied direct from the above offices. Subscriptions, payable in advance: Yearly, £5 4s. (post free); half-yearly, £2 12s. An order form appears on page 736.

Advertisements

Advertisement rates may be obtained on application to R. Binfield, Advertisement Manager.

A VALUABLE CONTRIBUTION

A T this time when exports are of paramount importance to the economic well being of the country it is perhaps not out of place to focus attention on the overseas activities of British consulting engineers.

The annual report of the Association of Consulting Engineers reveals the enormous scope of the projects which they are undertaking abroad. Members of the Association alone are working in 98 overseas countries on contracts totalling £735,000,000.

A great proportion of the overseas work is being carried out in Africa and the countries of the Middle East. All along the west coast of Africa there are large-scale schemes of road and bridge building, drainage and sewerage, hydro-electric and thermal power station building, harbours and docks, railways and transmission lines, while there is a large list of electrical and mechanical service contracts. Airports and water installations are being built in a score of countries.

There are British consultants for the Baghdad New International Airport, an £8,500,000 project, and for the Kuwait International Airport, which will cost £6,000,000. Other airports on which British consulting engineers are engaged are two in Iran costing together over £5,000,000, another at Qatar on which £1,400,000 is being spent and four more in Iran totalling £2,348,000.

There is a drainage project in Baghdad on which the existing contract is for £5,800,000, the future stages of which will cost a further £20,000,000. Khartoum is being provided with a main drainage system costing £3,000,000.

The Z.A.D. irrigation projects in Iraq, which will cost £37,000,000 are being handled by British consultants, as is the canalisation and minor drainage project for which the tender was £15,516,000.

Harbour works are being carried out in Newfoundland, Quebec and Ontario, in Trinidad, Barbados, the Leeward Islands, British Guiana, Bermuda and Jamaica. British consulting engineers are working on harbours and docks in Ghana, Burma, Malaya, Singapore, Sarawak, North Borneo and Hong Kong and on hydro-electric and thermal power projects in Venezuela, Argentina, the Federation of Rhodesia and Nyasaland, South Africa, Australia, Ceylon, Malaya and New Zealand.

These details, while in no way comprehensive, serve to illustrate the contribution which consulting engineers are making towards the country's overseas activities. And they are not only exporting their knowledge and services, for as the Minister of Works recently wrote in this Journal, "Trade now follows the civil engineer".

Not All Depressing

SOME indication of the way the Government's economy measures will effect construction is to be found in recent Ministerial statements. The Minister of Housing intends to concentrate on getting the 123,000 houses and flats now under construction completed, together with the 47,000 for which tenders have been approved, but on which work has not yet started. Approval of further tenders is to be slowed down. Providing this slowing down process is not taken too far the Minister's policy is a realistic one as many authorities are complaining that shortages of building labour are delaying completions.

It appears that the present hospital programme is to be left untouched, but in education minor works are to be used as the economic regulator and big cuts are to be made. "Luxury" building by local authorities is out. As far as private building is concerned industrialists and developers will no doubt cancel or postpone some of their schemes. The Minister of Housing has in fact given the view that the Chancellor's "severe measures" against speculative building of various kinds are almost certain to slow it down.

But not all recent Ministerial statements have been depressing. Mr. Ernest Marples, Minister of Transport, has announced that road construction expenditure in 1962-63 will be £90.5m. and will increase annually to give a total of approximately £540m. over the five years ending 1966. The Government propose to expand the trunk road programme enabling approximately 50 per cent, more work to be undertaken from April next. It seems that at last the Government realise the productive value of good roads.

MUNICIPAL ENGINEERS VISIT GRANTHAM BY-PASS SCHEME

Experimental Work on Design of R.C. Road Slabs

MORE than 100 members of the East Midland District of the Institution of Municipal Engineers recently inspected the work in progress on the con-struction of the Grantham By-pass. This scheme covers 10 miles of dual 24ft. carriageway reconstruction work, on the Great North Road Route A.1, from

Great North Road Route A.I., from Colsterworth to Gonerby Moor.

For contract purposes the scheme is divided into Section I, covering the reconstruction, realignment and regrading of the existing road, from Colsterworth to Little Ponton, a length of 4 miles, and Section II, the by-pass from Little Ponton, westwards of Grantham to Gonerby Moor, a length of 6 miles.

Section I

This section is being constructed to give an effective width of between 80ft, and 140ft, made-up of two 24ft, carriageways divided by a 24ft, central reservation and bounded by verges, 4ft, 6in, of which is constructed as hard shoulders.

construction The carriageway

follows: follows:—

On filling
Granular sub-base
20 to 1 lean mix concrete foundation sprayed with 55 per cent. bitumen emulsion

Two coat hot rolled asphalt surfacing laid in 2½in, and 1½in, thickness Thickness 3in. 16in. thickness 4in. On rock 20 to I lean mix concrete levelling-up course 20 to 1 lean mix concrete founda-3in.

20 to 1 lean mix concrete foundation sprayed with 55 per cent. bitumen emulsion ... 8in. Two coat hot rolled asphalt ... 4in. All materials being machine laid. The concrete haunches to the carriageway follow the truncated motorway section, being 12in. wide at the top widening to 36in. at the bottom over the depth of 20in. The concrete is to M.O.T. Class A standard to have a minimum strength of 4,000lb. at 28 days. It is laid to have dowelled expansion joints at every 50ft. and is reinforced throughout with 8lb. per sq. yd. steel fabric. The top lin. is finished in a proprietary white mix concrete.

The maximum depth of cut is 30ft. the excavated material being mainly fragmented and boulder limestone.

Embankment depths are up to 25ft. and

these have been filled up to 2ft. and consolidated in loose layers to give not more than the maximum air void content specified.

specified.

Cutting faces and slopes vary from 1 to 1 in rock to 4½ to 1 in clay.

There is no piped channel drainage. The surface water flows on to the verges into "french" drains which are piped to connect to the land drainage systems.

Material quantities are: Excavation top soil, 15,000 cu. yd.; excavation generally, 500,000 cu. yd.; excavation rock, 140,000 cu. yd.; 20 to 1 lean mix concrete, 45,000 cu. yd.; hot rolled asphalt, 115,000 sq. yd.; and concrete in haunches, 9,000 cu. yd.

Section II

Section II

This section, from Little Ponton to Gonerby Moor covers the by-pass construction which follows a route to the west of Grantham over a length of 6 miles of new road. It involves the construction of five overbridges and three underbridges—six of which carry or cross incoming roads and two span the railways. The by-pass follows motorway construction lay-out with no connections to incoming roads except at the two Class A roads which are connected by half clover leaf junctions. The north end of the by-pass, at Gonerby Moor where it joins the existing dual carriageway is terminated by a 200ft. diameter island.

The effective road width is 93ft. made

The effective road width is 93ft. made up of two 24ft. carriageways divided by a 13ft. central reservation and bounded by verges 10ft. of which is constructed as hard shoulders.

The maximum depth of cutting is 30ft, the excavated material varying from fragmented and boulder limestone, at the Little Ponton end to the Harlaxton Road, route A.607, and from this point onwards because the control to the second to the se

route A.607, and from this point onwards blue clay with gravel pockets.

Embankment depths are up to 35ft. and these have been similarly filled and consolidated as for Section I except in that the top 2ft. below formation the air void percentage is not to exceed 5 per cent, and this is causing some difficulty.

Many difficulties have been experienced in the clay stratum due to slips where slopes of 4½ to 1 have been necessary to ensure stability.

The blue lias clay has a very low water content and this is causing some problems in consolidation where watering methods were attempted to raise its plastic nature.

It has now been decided to reject the use of this material in the 2ft. below formation due to possible future swelling.

Except at the approach to underbridges where flexible carriageway construction is followed, the dual carriageways throughout are being constructed in concrete to the specification, and under the direction and supervision of, the Road Research Laboratory.

and supervision of, the Road Research Laboratory.
Material quantities are: Excavation top soil, 61,000 cu. yd.; excavation rock (estimated), 350,000 cu. yd.; excavation surplus clay, 210,000 cu. yd.; 20 to 1 lean mix 3in. sub-base, 221,000 cu. yd.; and concrete base beams for road forms, 3,500 cu. yd.

Eight Bridges

The scheme includes eight bridges, one pedestrian subway, one 15ft. x 15ft. reinforced concrete cattle creep and two large span culverts.

span culverts.

The Sedgebrook - Honington railway bridge comprises an 8in. R.C. decking slab carried on 24in. x 12in. steel B.F.B. with cellular R.C. piers and abutments. The bridge is carried on 120 17in. diameter (sulphate resisting cement) in-situ concrete piles each tested to 60-ton load.

The Grantham - Nottingham railway bridge is of similar construction.

The Nottingham road bridge, an overbridge, comprises 8in. R.C. decking slab carried on prestressed precast concrete beams with cellular R.C. piers and abutments. There are four spans—the centre span 51ft. and the end spans 38ft. Decking

ments. There are four spans—the centre span 51ft, and the end spans 38ft. Decking beams are carried on rubber/steel expansion bearing blocks.

beams are carried on rubber/steel expansion bearing blocks.

The Dysart road bridge and the Harlaxton road bridge are of similar construction.

Gorse Lane road bridge is a R.C. rigid frame bridge of 9lft. skew span with cantilevered wing walls carried by abutments. It is founded on limestone stratum and is pin jointed at the base.

Stroxton road bridge is a 33in. R.C. slab structure carried on trestle piers and cantilever abutment walls with wing walls cantilivered from abutments. Of four spans, the decking is carried on Mehanite cast steel roller expansion bearings.

The Grantham slip road bridge is a R.C. girder bridge carried on trestle piers and cantilever abutment walls and wing walls.

Contractors' Plant

Contractors' Plant

The type of material to be excavated on both Sections I and II on the contract



Slip road and offices looking north

varies from soft peat to hard rock and there has been a large variety of excavating plant required. The bulk of the earthmoving has been carried out by two main types: (a) Rubber tyred motor scrapers; (b) face shovel or dragline and dump trucks. During period of maximum effort there were two 54 RB face shovels and two 43 RB face shovels loading into Euclid. A.E.C. and Foden dump trucks, most of the material being rock. A 43 RB dragline has also been used with Foden dump trucks to excavate unsuitable material including peat. Material other than rock has been largely excavated and hauled by twin powered Euclid scrapers, two sizes being used. 24 cu. yd. and 14 cu. yd. struck capacity. There have been four and five respectively of these two sizes on the contract and in addition five Caterpillar DW 21 motor scrapers of 18 cu. yd. struck capacity. With all this plant there have been D9 and D8 pushers, buildozers, Hyster varies from soft peat to hard rock and there been D9 and D8 pushers, bulldozers, Hyster Grid rollers and various types of pneumatic tyred rollers.

tyred rollers.

In addition to the above there have of course been substantial small plants such as Drott shovels, graders, small excavators and small haulage units including Shawnee

Most of the drainage has been carried out by standard Ruston backacters, but some of the later type hydraulically operated tractor mounted back hoes have also been used, e.g., J.C.B. and Massey-

also been used, e.g., J.C.B. and Massey-Ferguson.
Only a very small amount of plant has been needed for the bridgeworks, none of it being unusual, but some concrete on two of the bridges was placed with a 4in, dia. concrete pump. All other concrete was placed direct by truck mounted concrete mixers (ready mixed) or by crane from these vehicles. The excavation for bored piles was carried out by hand-operated winches. winches.

Concrete Mixing

There will be three main concrete batch-There will be three main concrete batching and mixing plants on the contract, one principally for the flexible part of the contract (Section 1) and the other two principally for the rigid construction on the by-pass (Section II). Brief descriptions of these plants are as follows:—

(a) S.G.M.E. mixer at Little Ponton. This is a split drum mixer of $1\frac{1}{2}$ cu. yd. capacity with output of 60 cu. yd. per hour. The batching system is fully automatic with a preselection for three different mix designs. The four dry hoppers are loaded by a 1 cu.

batching system is fully designs. The four dry hoppers are loaded by a 1 cu. yd. Chaseside loading shovel and the aggregates are fed on to conveyors by electric controls, and the conveyors in turn feed the weighbatcher. The cement storage capacity is 60 tons, and this is also automatic electric controls. Water is introduced directly under pressure into the mixer drum by an electronically controlled water meter The whole of the plant is worked by one operator and a labourer Twelve Ford Thames Trader lorries draw concrete from this plant. concrete from this plant.

oncrete from this plant.

(b) Plants for by-pass concrete carriageway. These two plants are identical, one erected at Gorse Lane and one at Barrowby. The mixer unit comprises Fiermert 1.3 cu. yd. Turbo-mixer which is gravity fed from a holding box which in turn is fed by a belt conveyor from the batcher. The batcher comprises high level hoppers divided into three compartments which is fed by 22 RB draglines. Weighbatching is accomplished by a Parsons automatic weighgear. Cement is fed into the mixer by an airslide from a high level hopper and there are two additional cement hoppers to give a total storage of 90 tons of cement. Twelve special side tipping lorries (Commers) will draw from these plants. Capacity of each mixer is up to 400 cu. yd. per day based on mixing time of 30 seconds.

per day based on mixing time of 30 seconds. Concrete Laying

(a) On Section 1 of the contract the dry lean concrete has almost all been put down with a Blaw Knox PF90 Paver and the capacity of this machine has always been in excess of the mixer feeding it, it is stated. Compaction is by means of a standard 18½cwt. tandem vibrating roller (Stothert and Pitt).

(b) On Section 2 the main concrete laying plant is of S.G.M.E. manufacture (Belgian). A standard S.G.M.E. spreader is used to lay the 3in. thick dry lean subbase and the compacting plant is the same as for Section 1 described above. The main concrete base plant consists of two

as for Section 1 described above. The main concrete base plant consists of two spreaders and two finishers each of which are special in design in many respects to meet the special requirements of the R.R.L. on the experimental lengths.

The spreaders comprise a 4 cu. yd. hopper with controlled discharge and the speed of the machine and the rate of travel are 50ft. per minute and the spreading level is adjustable from 4in. below the forms to 4½in. above. The finishers are fitted with articulated carriage to even out irregularities in the forms.

rregularities in the forms.

A variety of other plant follows the "train" and consists of a curing compound spraying machine, a carriage carrying a

have been laid. By eliminating the struc-tural weakness due to the joints, con-tinuously reinforced slabs are stronger but

tural weakness due to the joints, continuously reinforced slabs are stronger but the effective control of cracking is a problem on which more design data are needed. Further information on the behaviour of this type of construction will be provided by four slabs on the Grantham By-pass having lengths of 4,000ft. or 4,500ft. and including reinforcement weights of 104lb. and 164lb. sq. yd.

To determine whether better control of cracking can be obtained sections of the road will be laid with deformed wire fabric having higher bond strength and with fabrics containing extra cross-wires having higher bond anchorage. Other sections will be laid with mild-steel fabrics to compare its behaviour with the cold-drawn steel normally used for road fabric. The distribution of the reinforcing steel across the width of the road will be varied in



Site of Lodge Gates looking south

small mixer for the construction of the white margins and specially designed white margins and movable curing covers.

movable curing covers.

A profilometer provided by the R.R.L. is also included in the "train" for the purpose of measuring surface accuracy. All black top surfacing on flexible sections has been laid with PF 90 Paver and

compacted with both standard 10-ton rollers and tandem rollers.

R.C. Road Slab Experiments

The visiting Municipal Engineers were told of experiments which are being carried out by the Road Research Laboratory on the by-pass on the design of reinforced concrete road slabs. Experience has shown that reinforcement is essential has shown that reinforcement is essential for the satisfactory performance of heavily trafficked concrete roads, and the ability of steel fabrics to control effectively the opening of cracks has been demonstrated by roads which are now over 25 years old. The use of reinforcement enables joints to be spaced more widely and this is desirable from the aspects of maintenance and appearance although it is no longer necessary from the aspect of riding quality as improved methods of construction have eliminated the undulations which used to eliminated the undulations which used to occur at joints

occur at joints.

Reinforcement is an expensive item in the construction of a concrete road and it is therefore desirable to use it as efficiently as possible. The minimum weight of reinforcement fabric needed to prevent cracks of unacceptable width will be determined from the Grantham experiments where fabrics possibles 23th 41th. nent where fabrics weighing 24th, 64th, 104th and 164th sq. yd. are included in slabs ranging from 40ft. to 900ft. long. Some sections with dummy joints at 15ft., 30ft. and 80ft. intervals will be included.

The use of continuously reinforced con-ete in which the only joints are end-day tied construction joints has met with varying success in the United States where a number of experimental lengths some slabs; in some cases the steel will be heavier in the most intensively tracked part of the road and in other cases it will be heavier at edges of the slabs. In other slabs the amount of transverse steel will be increased and the central longitudinal joint omitted.

Laying of Slabs

A further experiment on the by-pass will consist of laying slabs directly on the lean concrete base in one carriageway, and in the other carriageway on a special sliding layer consisting of a double layer of plastic film on waterproof paper laid on the lean concrete. The incidence and width of cracking in these two lengths will be compared.

be compared.

Crack surveys will be made after the Crack surveys will be made after the slabs are laid and at frequent intervals afterwards. Gauge points will be installed along selected lengths of the road so that changes in the width of joints and any cracks that form can be measured. Along-side these sections reference blocks will be constructed to enable longitudinal movement of the slab to be determined. The occurrence of cracks is influenced by the weather conditions during and after laying occurrence of cracks is influenced by the weather conditions during and after laying the concrete and two weather stations are being set up alongside the by-pass, one on the higher ground at the south end and one on the low-lying ground at the north end. The weather stations will ir clude concrete slabs in which thermocouples are set at various levels. All measurements made on the road will be related to the temperature conditions

measurements made on the road will be related to the temperature conditions occurring at the time.

The thickness of the road is in accordance with normal recommendations for the soil and traffic conditions at Grantham, which require 9in. of concrete in cuttings or 10in. on embankments over 4ft. high. In both cases a 3in. lean concrete base is used. All constructional operations are being closely controlled. Density, moisture

(Concluded on page 698)

John Sumner's Notebook . .

SOME weeks ago I had occasion to comment upon the views expressed by Nicholas Davenport regarding build-ing controls. Writing in *The Spectator* at that time, he left readers in no doubt that in his opinion a return to the control of building activity would prove to be a major cure for the country's economic ills.

I went to some length to point out how stupid a theory this was. Now Mr. Daven-port returns to the fray by suggesting that the Government should confess that it has been pursuing idiotic economic policies. has been pursuing idiotic economic policies, refusing to plan and direct the two sides of industry (as if it had a chance of ever doing anything of the kind), refusing to apply a building control and so allowing "the building and contracting industry to over-reach itself and force up wages. . ."

Well, if Mr. Davenport won't take my arguments perhaps I may refer him to those who have a little more knowledge than he has in matters of this kind, as well as a little more information on which to base their conclusions. First, the than he has in matters of this kind, as well as a little more information on which to base their conclusions. First, the Plowden group's report on the control of public expenditure. Condemning the practice of chopping and changing Government expenditure policy according to the immediate needs of the economic cycle, the report points out that all the experience of recent years shows that short-term "economy campaigns" and stop-and-start practices are highly damaging to the economy as well as to industry. Instead the group advocate, in place of the Government's present tendency to take decisions on expenditure piecemeal, the introduction of a system of long-term planning by which industry—and this would particularly apply to building and contracting—would be likely to know, and be better able to prepare for, their commitments over a four- or five-year period.

This is nothing short of what construc-

This is nothing short of what construction contractors have been patiently try-ing to get ever since the war, and it is a tribute to the efforts which they have been making that those closely associated with the Government have, in more recent times, been gradually moving in this direction.

direction.

But if Mr. Davenport does not like to accept the views of Lord Plowden and his colleagues, perhaps he may like to consider those of Lord Hayworth, Sir Harold Emmerson and Professor E. H. Phelps Brown—the "three wise men" who make up the Council on Prices, Productivity and Incomes. These three gentlemen consider that cuts in investment programmes are the least preferable means by which the that cuts in investment programmes are the least preferable means by which the economy should be regulated. They say there is little point in a programme that is subject to interruption, yet they point out that hitherto it has been investment that has had to bear the greatest part of the cutting back when restraints have been imposed. As they point out, higher interest rates, the restriction of bank advances, and the paring of plans in the public sector fall mainly on investment.

It looks to me as though Mr. Davenport

It looks to me as though Mr. Davenport and Mr. Harold Wilson stand alone in their call for a return to building licensing and controls.

Bonus for Safety

Now that the Sir George Earle Trophy has been awarded to John Laing, and the London Master Builders Association and the Woodhall-Duckham Group have been commended for their efforts in the field of safety, what is the industry going to do about reducing the number of accidents still occurring at a daily rate which is nothing short of appalling? I

am willing to wager that not one firm in 10,000 will lift a single finger between now and Christmas to make their sites safe unless a fatal or near-fatal accident occurs on one of them in that time.

One in 10,000 is a small number, but within that select band I place the Walter Llewellyn group of London, Eastbourne and Hastings. This go-ahead, efficient organisation has announced that over the next six months it proposes to hold a safety competition between the various sites for which the firm is responsible. A first prize of 15 guineas to the general foreman and 10s. to each operative on the site, a second prize of 10 guineas to the general foreman and 7s. 6d. to each operative and a third prize of 5 guineas and 5s, are offered. The idea is that each site will be given a credit of 100 marks and penalty marks will be deducted, 20 at a time for each infringement of the Safety Regulations found by a judge and 10 at a time for each fault found in the keeping of the statutory records. The judges will also be able to award 10 bonus marks for any particular safety feature which a foreman has adopted although not required by the Regulations or to deduct 10 penalty any particular safety leature which a fore-man has adopted although not required by the Regulations or to deduct 10 penalty marks for any instances of unsafe practices, even though they are not specifically pro-hibited by the Regulations.

hibited by the Regulations.

My guess is that it took a little bit of time and trouble for the directors of this group to work out the scheme, but I am sure that the company as well as its operatives will benefit. It is a good scheme, and I can only express the hope that other firms throughout the industry will copy it. Llewellyns won't mind; they'll be pleased, and flattered.

Just in case any cynics have got the

Iney II be pleased, and flattered. Just in case any cynics have got the idea in their heads that positive steps to prevent accidents are all so much hooey, let me remind my readers that in 1960 accidents in all industries (and they were highest in building) resulted in a loss of 19,000,000 man-days and that the financial loss amounted to £100m. Only 3,000,000 man-days were lost through strikes—official and unofficial.

Who's to Blame?

WHILST on the subject of making the WHILST on the subject of making the best of available resources of labour perhaps I may mention the continuing gravity of the low level of recruitment to the building industry. It is still far too low, you know, despite the fact that we are now getting larger numbers of school-leavers at the end of each term than ever before.

From what I have written in the past it may have been concluded by some readers that I have blamed the building employers for the low level of recruitment.

readers that I have blamed the building employers for the low level of recruitment. And so I have, but fairness prompts me to say that the blame does not always rest with the builders. Sometimes it rests with the boys and, more particularly, with their parents. In several parts of the country, it seems to me, parents appear to accept no responsibility at all for ensuring that their children are put on the right road to learn a craft or some form of technical skill to fit them for a useful and well paid career.

Cardiff seems to be a place which illustrates this. Although the builders in that city have recently carried out an intensive recruitment campaign they are faced with an acute shortage of craftsmen because few school-leavers are prepared to take up building apprenticeship. There are about 70 vacancies at the moment for apprentices among Cardiff's principal building firms and Mr. John Hicks, the secretary of the South Wales Federation of Building Trades Employers, tells me that it seems unlikely that the number of youngsters

required will come forward. One of the more serious aspects of the position is that the reluctance of school-leavers to subject themselves to apprenticeship training is likely to result in a pre-apprenticeship course organised to start in September at Llandaff Technical College being a non-

To me, being one who has always considered the Welsh people to be in the forefront of those anxious to qualify academically and technically, this state of affairs is more than a little mystifying. The recruitment campaign of the builders seems to have failed, and one is entitled to ask why. I do not think it is because it was conducted with insufficient energy, but I do think that the reason for its failure may be due to the lethargy and disinterest, so far as careers opportunities in the building industry are concerned, among youth employment officers and careers masters. I cannot believe that in a city so large as Cardiff there can be this shortage of recruits unless it is due to the fact that Y.E.O.s and careers masters are failing in their job of persuading are failing in their job of persuading parents that properly indentured building apprentices are really on to a career-worthy thing. I can only express the hope that this note will make them pull their socks up.

"The Honeywood File"

"The Honeywood File"

SOME time ago when the B.B.C. programme "Building Matters" was in full swing the suggestion was made on several occasions that the producer (at that time, Mr. Robert Gunnell) should seriously consider including extracts from the late H. G. Cresswell's immortal "The Honeywood File." How, I wondered, anyone could possible hope even to think about this literary masterpiece in anything like a serious frame of mind I wouldn't know. However, Mr. Gunnell, being the type of producer he is, did not let the suggestion go by unnoted. Subsequent events made it difficult to incorporate extracts from the book in the "Building Matters" programme and so Edward Mills, the architect member of the "Building Matters" panel, was entrusted with the task of adapting it for broadcasting in a separate programme.

I understand that his task has now

I understand that his task has now been completed and that everybody in the building and architectural world will soon (a firm date has not yet been fixed) through the medium of the B.B.C. Home Service, be able to renew acquaintance with Sir Leslie and Lady Brash, the conscientious Spinlove and that glorious personification of all true building men down the ages, Grigblay.

My advice to all is to keep a weather eye open for the B.B.C.'s announcement of the date of the broadcast. It will, I am convinced, be a first-class treat which should not be missed.

Please Copy

HAVE never been able to determine, beyond all dispute, whether Grigblay did, in fact, get his final account for the construction of Honeywood Grange, in the County of Kent, satisfactorily settled. construction of Honeywood Grange, in the County of Kent, satisfactorily settled. But I am strengthened in the hope that he did by some recent information from far away Exmouth, in the County of Devon. There, at a recent builders' dinner in the Pavilion, Mr. H. Jarvis Graves, the chairman of the Urban District Council, said that except for a year's lapse, in 1959-60, the council had for the past 21 years had accounts with private builders and paid them regularly every month as work was done. "The council owes the Exmouth builders a debt of gratitude," he said. And I would say that the Exmouth builders owe the council a debt of gratitude, particularly as Mr. Bernard Stanbury, the Plymouth builder, intimated that the council did, in fact, pay their builders each week. To the other 1,499-odd local authorities throughout the country I would say, please copy. say, please copy.

ip at n-

g. rs to

it

y, ts

es d, nd in

to

at

y.
nk
ng
n't
he

nt x-ng rd he

in ill d),

n-us en

nt

in ed. hat om he aid 60,

aid vas nd

the cal

UNUSUAL TIMBER SHELL ROOF AT DORSET HOLIDAY CENTRE

Hyperbolic Paraboloid Spans 88 ft.

DANCE hall and entertainments centre built at the Rockley Sands wan holiday camp, near Poole, caravan holiday camp, near Poole, Dorset, features a timber shell roof which is one of the first hyperbolic paraboloid shell roof structures of hexagonal configuration in plan to be erected in this country.

The whole roof structure, 88ft. across its longest dimensions, is supported at the low points on six 12ft. high reinforced concrete columns, designed as cantilevers to resist wind pressure on roof and clad-

to resist wind pressure on roof and cladding.

Mild steel shoes provide seating for the radial beams and the tie bars. Two \{\}in.\) holding down bolts pass through the radial beams and the shoe and are anchored in the reinforced concrete column. The six main radial beams, 38ft. x 12in. x 12in. overall, incline to the apex of the roof and were factory laminated from Sealex grade Douglas Fir laminae, glued with Cascophen Resorcinol resin glue.

In order to provide added stiffness to the structure as a whole, the radial beams were fabricated in untwisted top and bottom halves common to the two adjacent shells, instead of adopting the more usual practice of providing separate twisted edge beams for each shell. The twist in the seating for the shell boards was obtained by shop gluing variable wedge shaped pieces to each half of the radial beams. The shell boards were glued to the beams with Cascamite "One Shot" resin glue.

The six edge beams, 22ft. x 9in. x 4\{\}in.\) were also factory laminated. They were fabricated with a twist in each of the two halves, so that the shell boards could be glued directly to them.

The shell membrane was constructed

halves, so that the shell boards could be glued directly to them.

The shell membrane was constructed from three layers of \(\frac{1}{2}\)in. nominal T. and G. Group II Baltic Redwood boards glued each to the other with Casco Casein glue. Top and bottom layers run in the arch direction (from low corner to low corner) and the middle layer in the tie direction (from high corner to high corner). It has been found that running the boards this way provides a more rigid structure than that obtained by running the boards parallel to the sides of the roof. Moreover, it is advantageous to use this "balanced construction" since this reduces the effects of differential movements of the timber.

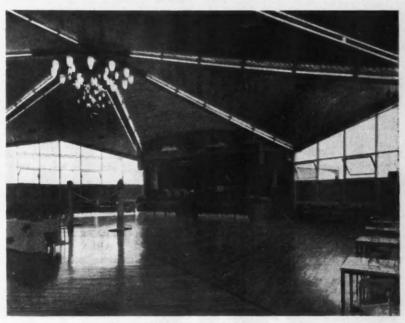
A Urea Resin glue was used for the important connection between the shell boards and the beams because this work had to be done on site and under conditions which precluded the use of a

tions which precluded the use of a Resorcinol resin.

The tie bars which accommodate outward thrust of the roof are fabricated each in 12 lengths, six straight and six curved, connected to each other through turnbuckles. By this means it is possible to simplify the detail at the column head as the tie bars are continuous at this point. The tie bars are of mild steel and are

changing load conditions. Each bar was tightened as far as possible by hand before lowering the scaffolding clear of the completed roof. Deflections on removal of the scaffolding were less than lin. at all points.

The structure of the flat roof area of the building adjacent to the main hall comprises laminated timber main beams—varying in length from 20ft. to 25ft. and 4½in. x 17in. in cross-section—spaced at approximately 11ft. centres. They were manufactured from a selected grade of Douglas Fir laminae glued with Cascophen Resorcinol resin glue. The 3in. thick



Interior of the completed main hall

stressed to 8 tons p.s.i. under full dead and live loading. The choice of mild steel coupled with this relatively low design stress was made in order to limit the deflections at the column head under

double T, and G, solid timber decking spans between these beams without any intermediate supports and gives a clean uninterrupted natural timber ceiling.

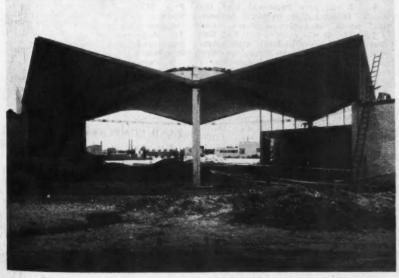
Great care was taken that the building should sit well in its landscape and, to contrast with the visual interest of the main hall, the ancillary accommodation has plain brick walls with white sand lime facings. The external walls of the hall consist of large timber framed windows from floor to roof with opaque glass fibre panels up to door height and plate glass above. A number of 18in. square outlets have been cut into the timber shell roof to house Vent-Axia extractor fans.

square outlets have been cut into the timber shell roof to house Vent-Axia extractor fans.

The decorative effect internally is obtained very largely from the natural beauty of unpainted timber and the play of light and shadow on flat and curved surfaces. The main floor is of Maple strip; other floors are of p.v.c. tile.

The building incorporates a basement area providing space for storage of theatrical equipment and part of this basement also serves as a cellar for the bar, situated on one side of the hall.

The architects for the building were Farmer and Dark, Poole, and the main contractor was Staveton Contractors, Ltd., Totnes, Devon. Specialist timber work was fabricated and erected complete by the Timber Engineering Division of Gabriel Wade and English, Ltd., Southampton. It was designed for them by E. W. H. Gifford and Partners, consulting engineers, Southampton, in close co-operation with the architects.



View during construction showing timber roof, tie bars and supporting columns

LOCH AWE HYDRO SCHEME Contract for Cruachan Underground Station

THE North of Scotland Hydro-Electric Board have placed the contract for the construction of the Cruachan underground pumped storage power station of the Loch Awe scheme with Edmund Nuttall, Sons and Co. (London), Ltd.

The principal feature will be the under-The principal feature will be the underground machinery hall which will be about 350ft. in length and 65ft. in width, with an arch roof about 120ft. above the lowest floor level. As far as practicable the rock. which will be granite, will be left exposed where it forms the walls of the machinery hall

hall.

Adjacent to the machinery hall, additional accommodation will be provided underground for control and switchgear rooms and also for high voltage transformers to be housed in two chambers each about 45ft. square and 53ft. in height. A combined ventilating and cable shaft about 1,050ft. in height and 13ft. in diameter will connect the transformer chambers with a sub-station at the surface near the dam.

Connection with Dam

Two inclined shafts, each 15ft. in diameter and approximately 1,700ft. in length will connect with the dam at the head of the Cruachan Burn to convey water to and from the power station. The connection between the power station and Loch Awe will be by a tunnel 3,200ft. long and 23ft. in diameter.

The whole of this work involves the excavation of approximately 200,000 cu. yd. of rock.

The civil engineering consultants for the

The civil engineering consultants for the Cruachan section of the Awe Scheme are James Williamson and Partners, of Glasgow.

VAUXHALL MOTORS FACTORY £3,894,000 Contract Announced

As forecast exclusively in *The Contract Iournal* on July 27, Vauxhall Motors, Ltd., have now announced the award of a £3,894,000 contract to Sir Alfred McAlpine and Son, Ltd., for the construction of their new factory at Hooton Park, Cheshire. The structural steelwork will be supplied and erected by Redpath Brown and Co., Ltd., pt £560,000 at £560.000

at £560,000.

Howard Fairbairn and Partners are the architects, and G. A. Dodd and Partners the consulting engineers. The quantity surveyors are G. D. Walford and Partners. The main unit will be a single-storey factory of over 1,000,000 sq. ft., at the east end of Hooton Park site, facing North Road. Adioining this will be a number of small buildings, including a boiler house occupying approximately 16,000 sq. ft.

£325,000 BRISTOL HOSPITAL CONTRACT

United Bristol Hospitals have placed a £325,000 contract with John Laing Construction. Ltd., for extensions to the Bristol Dental Hospital. Work will start towards the end of this month.

Dental Hospital. Work will start towards the end of this month.

The scheme has been designed by W. H. Watkins, Gray and Partners, 8 Colston Avenue. Bristol, and the consultants include: Faithful and Gould, quantity surveyors, Eagle House, Colston Avenue, Bristol: Hoare Lea and Partners, engineering and electrical consultants, 21 Oakfield Road, Bristol 8; and Clarke. Nicholls and Marcel. structural consultants, 10 Apsley Road, Bristol 8.

The extensions form the first part of a £10 million ten-year development to be undertaken by the United Bristol Hospitals on a 34-acre site in the St. Michaels Hill area, near the Bristol Royal Infirmary and the Dental Hospital. The plan includes a new outpatients' department for the Infirmary, and a new outpatients' department for the Children's Hospital. Later a 14-storey ward block, a new maternity hospital and nurses' homes will be built.

DARTFORD - PURFLEET TUNNEL

£11m. Completion Contract

THE contract for the completion of the Thames tunnel between

the Thames tunnel between Dartford and Purfleet has been placed by the Ministry of Transport with Marples, Ridgway and Partners, Ltd. Their tender amounted to £1,478,364. The tunnel will connect the London-Tilbury Trunk Road (A.13) with Princes Road, Dartford (A.2). Steady progress is being made with the construction of the approach roads on both sides of the river, and it is expected that the tunnel will be open to traffic in the spring of 1963.

A reinforced concrete road, about

open to traffic in the spring of 1963.

A reinforced concrete road, about 1,560yd, long with pavings and footways and a suspended ceiling will be provided under the new contract, the walls of the tunnel being finished with mosaic tiles. Two ventilation buildings and shafts will be built, and electrical equipment for pumping, lighting and other services will be installed. In addition, the open cut approaches to the tunnel, each about 210yd, long, will be paved and the side walls finished with mosaic tiles.

Other Contracts

A contract has also been let to Communications Systems, Ltd., for automatic toll collection and registration apparatus, and ancillary equipment. This is being adopted to facilitate the movement of traffic through the toll booths. The cost of the contract is £31.934.

A further contract has been awarded to C. J. Sims, Ltd., for the construction of the administrative buildings at a cost of £133,050. These include workshops, canteen, stores, garages, and a public

convenience.

The consulting engineers for the scheme are Mott. Hay and Anderson. 9 Iddesleigh House, Caxton Street, London, S.W.1.

RANK TO OPERATE M.2 SERVICE AREA

The Rank Organisation, Ltd., have been

awarded the contract for the development of Farthing Corner service area on the Medway Motorway, M.2.

They will be given a 50-year lease, having been selected from a number of applicants for the rights to develop and operate petrol filling stations and catering premises within the service area. Their proposals include the provision of a terrace on a widened bridge over the motorway, with adjacent cafeteria, so that, in fine weather, visitors may eat in the open air.

DIRECT LABOUR

To the Editor of "The Contract Journal."

Sir,—I was very impressed with the article "Direct Labour by Local Authorities," which vou published in your issue of July 27. It was gratifying to find that your special correspondent's conclusions with regard to this controversial question coincide with those of my Federation. I feel that the article should be studied by everyone concerned with the problem of direct labour. everyone condirect labour.

As you point out, millions of pounds of public money are being spent without the check of competition and without the afeguards inherent in the contract system.

My Federation has always taken the line that the only effective way to discover the most efficient and economical method of most emcient and economical method of doing a job is to put it out to competitive tender. A Direct Labour Department, if tendering, should do so on equal terms with contractors, and its work should therefore be subject to the same kind of independent supervision. I am pleased to see similar opinions forcefully expressed in your columns. in your columns.

Yours, etc., A. Chas. Newman, Chairman, Public Relations Committee, Federation of Civil Engineering

Contractors.

Late Construction News

£½M. MANCHESTER CONTRACT. — J. Gerrard and Sons, Ltd., Swinton, Lancs, have been awarded a £500,000 contract by Humphreys and Glasgow, Ltd., for development at Clayton, Manchester. The project comprises a new production building, 238ft. x 126ft. x 55ft. 6in. high, and alterations and extensions to existing buildings. Work is due for completion within 12 months. The architects are Harry S. Fairhurst and Sons, Manchester, the quantity surveyors, Langdon and Every, London, and the consulting engineers, Taylor, Whalley and Spyra, the quantity surveyors, Langdo Every, London, and the col engineers, Taylor, Whalley and Manchester.

Manchester.

BIRMINGHAM SCHOOLS. — Three new special schools are to be built by Birmingham Education Committee in the Northfield District. The contract for the work worth about £250,000, has been awarded to Higgs and Hill. Ltd., South Lambeth Road, London, S.W.8. Plans are by Wood and Kendrick and Williams, 57 Colmore Row, Birmingham, 3, working in association with A. G. Sheppard Fidler, F.R.I.B.A. The quantity surveyors are L. C. Wakeman and Partners, 2 Lowndes Street, London, S.W.1.

The quantity surveyors are L. C. Wakeman and Partners, 2 Lowndes Street, London, S.W.I.

CUMBERLAND WATER SCHEME.—Millom (Cumberland) R.D.C. have accepted the tender of Norman Jackson, The Old Cooperage, Gatebeck, Kendal. at £132,471, for the laying of 18 miles of water main and the construction of two reinforced concrete reservoirs and a pumping station. The scheme will serve nine parishes.

LONDON LUXURY FLATS.—Leslie and Co., Ltd., Peel Street, London, W.8, are about to begin work on a seven-storey block of 25 luxury flats and four shops at 8 West Halkin Street and 7/10 Lowndes Street, London. S.W.I. Estimated to cost £250,000. the development is being promoted by Capital and Counties Property Co., Ltd. The architects are Sir Launcelot Keay, Basil G. Duckett and Partners, 22 Oldbury Place, London, W.1, and the quantity surveyors are A. E. Thornton-Firkin and Partners, 17 Fitzhardinge Street, London, W.1. Leonard and Grant, 171 Victoria Street, London, S.W.1, are the consulting engineers.

ACCRINGTON SHOPPING CENTRE.—Mullen and Durkin, Ltd., Trafalgar Street, Burnley, have been awarded a contract by The Goodacre Development Corporation for the erection of a shopping centre at Union Street, Accrington. The scheme has been designed by H. Hubbard Ford, 35 South Audley Street, London, W.1, cecil F. Baker and Partners, 51 Gildredge Road, Eastbourne, Sussex, are the quantity surveyors, and M. M. Khan, 88 Rochester Row, London, S.W.1, the consulting engineer.

Cowley Town Centre.—Contract with

engineer.

COWLEY TOWN CENTRE. — Contracts worth £150,000 have been placed with Kyle Stewart (Contractors), Ltd., Wembley Park, Middx., for the construction of a block of shops with flats over as part of the new town centre of Cowley, Oxford. The shops will be occupied by W. H. Smith and Son, J. Sainsbury and F. W. Woolworth Woolworth.

NOOIWOTEN.

STOCKPORT COLLEGE.—Stockport B.C. have placed a contract with Tersons, Ltd. London, N.3, for the erection of phase II of extensions to the Stockport College for Further Education, at a cost of £459,866.

LAND COMPENSATION ACT, 1961

The Land Compensation Act, 1961, which came into operation on August 1, repeals and re-enacts in consolidated form the provisions of the Acquisition of Land (Assessment of Compensation) Act, 1919, and certain subsequent enactments relating to the assessment of compensation in respect of compulsory acquisition of interests in land; to the withdrawal of notices to treat; and to the payment of additional compensation and allowances in connection with entire the payment of additional compensation and allowances in connection. with such acquisitions or with certain nurchases by agreement of interests in land. Some improvements and minor corrections have been made to facilitate the consolida-



il

J. Control of the con

FOR OUTINATED AND OUTPUT



Runway extensions, and the complex lighting and other associated services of the modern airfield require many miles of trenches and thousands of cubic yards of excavation.

IB machines are being used extensively for this work at London Airport and many other airfields of the world.

Reliability and efficiency make the obvious choice for important projects such as these, which must be finished to schedule irrespective of weather conditions.



ROCESTER STAFFS. CUTTOXETER 3122. TELEX 3654.

DEEP DIGGING



FACE SHOVEL



LOADING

I.C.O.S. CIVIL ENGINEERING TECHNIQUE

Services Offered by U.K. Company

THE Italian I.C.O.S. process—used for the first time in Britain on the construction of the Hyde Park Corner underpass—is to be made available to civil engineers in this country through newly formed company, I.C.O.S. a newly formed company, I.C.O.S. (Great Britain), Ltd., of Windsor House, 46, Victoria Street, London, S.W.1. It will offer the full range of foundation engineering services sponsored by its Italian parent company.

At Hyde Park Corner the I.C.O.S. process is being used successfully as an alternative to piling for the underpass excavation which would have created too much noise outside St. George's Hospital. (The Contract Journal, May 19, 1960.)

Milan Underground

Among important I.C.O.S. projects recently undertaken has been the construction of the Milan underground railway. The sidewalls of the nine-mile tunnel were built throughout by the I.C.O.S. process before the streets were closed to traffic. Excavation was then made to roof level of the tunnel, the roof was constructed, the excavation backfilled and the streets repayed. The tunnel was mined

structed, the excavation backfilled and the streets repaved. The tunnel was mined from below and the structure completed. On the River Moron Dam in Venezuela—an earth-fill dam resting on pervious alluvial soil—an I.C.O.S. diaphragm was constructed as an impervious cut-off wall. It connected with the fissured rock forming the sides of the valley and this rock was grouted to give it additional stability.

Alternative to Freezing

As an alternative to the freezing process, I.C.O.S. was used for a new shaft at the Willem-Sophia mine in the Netherlands. It is 15ft, in diameter and penetrates water-bearing sands with soft clay lenses down to the coal strata 220ft, below.

An example of basement construction with the I.C.O.S. process is the "La Presse" in Montreal Here an I.C.O.S.

with the I.C.O.S. process is the "La Presse" building in Montreal. Here, an I.C.O.S. diaphragm 35ft. deep was sunk along the 600ft. periphery of the building through layers of sand, gravel and boulders to reach underlying impervious rock. This isolated the area from surrounding structures and eliminated the risk of drawing fine particles of soil from them as a result of lowering the water table.

A second contract is now being undertaken in London—at the Museum telephone exchange.

phone exchange.

I.C.O.S. Process

The I.C.O.S. (Impresa Costruzioni Opere Specializzate) process, based upon the ideas and researches of Dr. Christian Veder, has been in existence since 1938. It is essentially a method of constructing walls or diaphragms in reinforced concrete, or structurally plastic material, in the ground before any excavation is opened up in the normal way. It is thus an effective alternative to the traditional method of trenching for retaining walls to basements, reservoirs, and docks, and for cut-off walls to dams. These diaphragms also bear favourable comparison as regards water tightness and stiffness and mechanical strength with diaphragms of steel sheet piling, precast piles, or cast-in-situ piles. The I.C.O.S. (Impresa Costruzioni Opere piling, precast piles, or cast-in-situ piles.

As a method of construction it can offer As a method of construction it can one advantages over such methods as caisson sinking, ground consolidation by injection, or freezing for work in difficult ground.

Use of Bentonite

The process is based upon the use of bentonite mud to stabilise and hold open the excavation for the diaphragm from the start of excavation for the diaphragm from the start of excavation until concrete has been placed. The peculiar thixotropic properties of bentonite enable the process to be used successfully in all types of ground, with or without ground-water present and even when large boulders are encountered. The bentonite mud used is a thixo-

tropic suspension of from 3 to 10 per cent. powdered bentonite in water, the strength of the suspension being adjusted accord-ing to the nature of the ground penetrated and the overburden pressures. The bentonite suspension, which has a density of about 70lb./cu. ft. not only exerts a hydrostatic pressure on the whole surface of the excavation but in addition pene-trates the interstices of the soil wherein it forms a gel and a thin impervious film, nt forms a gel and a thin impervious film, which acts as a boundary membrane with physico-chemical properties, on the sides of the excavation. It is these latter properties that distinguish bentonite from other muds which, although possibly heavier, would not work satisfactorily.

The bentonite is weigh-batched and mixed with water in hydraulic mixers from which the slurry is pumped to the section in course of excavation through a 3in.

diameter pipeline.

Excavation Excavation

The excavation for the diaphragm can be of any desired width or depth and the shape on plan can be adopted to suit any layout of the structure. The excavating equipment is a specially designed grab operated by a double-drum electric-powered winch and as the width of the excavation is determined by the dimensions of the grab, the I.C.O.S. company have, in the interests of standardisation, adopted 50 cm and 80 cm as the popular thickness of diaphragm. The maximum thickness of diaphragm. The maximum thickness of wall carried out so far is about 5ft. Increased flexural strength can be obtained by the addition of counterforts integral with the main wall slab or by the adoption of a zig-zag layout. This forts integral with the main wall slab or by the adoption of a zig-zag layout. This latter arrangement, like outsize sheet piling with "legs" 6ft. or more long on plan is a favourite for dock work. The depth of excavation is theoretically without limit. Mineshaft linings and dam cut-off walls have been constructed to 400ft. below the surface. Sub-surface obstructions that cannot be cleared by the grab are broken up percussively with a heavy chisel.

Reinforcing steel for the diaphragm must be prefabricated into cages of suitable dimensions for ease of handling, but in any event continuous for the full depth any event continuous for the full depth of the diaphragm. The cages are lowered into the slurry-filled trench by crane and suspended from the ground surface. Spacers wired to the outside of the cage ensure the required cover to the steel. The bentonite does not adhere to the surface of the steel at all. This is an interesting and, of course, very important phenomenon. Bond strengths have been tested and found equal to results achieved in normal reinforced concrete construction.

tion.

Concrete is placed by tremie in accordance with normal practice for under-water concreting by this method. The bentonite slurry is displaced as the concrete rises and flows over into adjoining sections of the work where excavation is in progress and is then reused. The number of times it is possible to reuse the mud in this way is limited by the degree of contamination of the bentonite suspension with ordinary soil particles taken up during the grabbing process. Work in clay soils leads to the most rapid contamination and that in clean gravels the least. A contaminated in clean gravels the least. A contaminated bentonite loses its thixotropic properties and its power to support the sides of the transh

Width of Bay

Width of Bay

The maximum length of wall that can satisfactorily be poured from one tremie position is about 16ft. and this is the normal average width of bay of an I.C.O.S. diaphragm. Vertical construction joints between bays are formed by temporarily placing a steel pipe of the same diameter as the thickness of the diaphragm in the trench at the end of the excavated section and this acts as a stop-end and a former for the joint as concrete is poured. The

half-round joints thus formed are very neat and remarkably watertight.

The nature of the steel-placing operation dictates that the design of the diaphragm as a reinforced concrete structure must be on the basis of a series of vertical beams or slabs side by side with vertical construction joints at regular intervals but no horizontal construction joints.

The concrete is not contaminated in any way by the slurry; concrete strengths suitable for normal permanent construction are achieved without difficulty.

The face of the diaphragm as exposed later in excavation for basements, subways, and similar applications, is, of course, more or less rough according to the type of soil penetrated. The necessary tolerance required for the addition of a fair inner face to the wall can be assessed from a study of the soil in exploratory borings. The surface of the 50 cm and 80 cm I.C.O.S. diaphragms forming the side walls of the running tunnels for the new Milan underground railway which have been constructed through loose gravel might be classed as "very rough" but are accepted as completely satisfactory for their purpose without further treatment other than a layer of gunite in certain places.

Accuracy of vertical alignment is also of a high order, especially with the most skilled grab operators. A preliminary guide trench ensures a correct start to the excavation after which gravity controls the grab.

articular advantages of the system used Particular advantages of the system used for temporary revetments, as at Hyde Park Corner, or for permanent load-bearing structures are the freedom from noise and vibration during construction, the lightness and manoeuvreability of the plant which can thus operate in restricted areas and, above all, the continuous stabilisation of the ground during construction even in the presence of ground water and surcharge from nearby structures.

Noise-level recordings of the plant at

Noise-level recordings of the plant at ork show that it is quieter than normal city traffic. The arrangement of the plant is such that diaphragms can be constructed as close as 2ft. from existing buildings.

BEHAVIOUR OF BRIDGE DECK SYSTEMS UNDER LOAD

The ultimate load of simply supported skew slab bridges is dealt with in Research Report No. 12, published by the Cement and Concrete Association.

The yield-line theory for calculating the ultimate loads of reinforced or prestressed concrete slabs is applied to skew slab bridges subjected to the Ministry of Transport's Abnormal Loading. Equations are derived which enable the designer to obtain the ultimate load simply by taking account of both the dead and the live loading.

Experimental work on 11 prestressed and reinforced concrete slabs is described, and the experimental ultimate loads are compared with the theoretical loads. In general, it is found that the calculated values are between 7 and 17 per cent. less that the experimental values.

experimental values.

Finally, a design procedure, combining elastic and ultimate load methods, is suggested for skew slab bridges subjected to abnormal loading.

The authors are C. A. Granholm, Civilingenjör SVR and R. E. Rowe, M.A., A.M.I.C.E.

RESEARCH PROJECTS POSTPONED BY D.S.I.R.

Fears for their capacity to meet demands on funds in the financial year 1962-63, have led the Council of the D.S.I.R. to have led the Council of the D.S.I.R. to postpone five major research projects cost-ing over £Im. The five projects are the proposed radio telescopes at Jodrell Bank and at Cambridge, and three nuclear reactors which were to be built for the use of the Scottish Universities, Liverpool and Manchester Universities and the Colleges of London University.

LEICESTERSHIRE QUARRY RECONSTRUCTION TREBLES PRODUCTION

WITH increasing production now at 7,000 tons per week, the output of hardstone aggregate from the reconstructed and redeveloped Croft Quarry, near Leicester, has been virtually trebled for The Croft Granite, Brick and Con-

crete Co., Ltd.

Planning for redevelopment commenced in the mid-1950's by first carrying out surveys of postwar hardstone quarry plants in the county, Europe and the United surveys of postwar hardstone quarry plants in the county, Europe and the United States. From these visits it was quite evident that the only realistic way of tackling such a major scheme was to build an entirely new plant, and on a scale that not only would it have capacity to deal with forecast demand over the next 20 years or so, but could be expanded economically to deal with any sudden and unexpected upsures in business.

years or so, but could be expanded economically to deal with any sudden and unexpected upsurge in business.

Initial considerations before the designers included the following requirements: Production of a clean aggregate to exact grading specifications for high quality concrete manufacture; that sufficient reserve of poorly crushed stone should be stockpiled in the circuit so that tertiary crushing and screening could be operated on a double shift basis if necessary; that not less than 30 per cent. of the output should be crushable to -\(\frac{1}{2} \) this that flexibility should be such that any unsaleable size could be recrushed and by variation of crusher settings, production of such sizes eliminated as far as possible; and that carrying out to stock and reloading should be avoided as far as was practicable.

By 1957, schematic layouts of requirements and broad specifications had been prepared and the decision was taken to proceed. It was decided to invite selected contractors to tender for the supply and erection of the plant, which while of the company's own design in detail, had to follow the broad outline of the layouts and specification as to output, type of machinery and quality of product laid down.

Two Phases

In order to avoid interrupting current

Two Phases

In order to avoid interrupting current production the scheme was planned in two

production the scheme was planned in two separate stages.

Phase I consisted of installation of the primary and secondary crushers on the quarry floor with a conveyor system to feed a partially crushed stockpile with draw off conveyors to an existing tertiary crushing and screening plant operated on a double shift basis.

Phase II comprised an entirely new tertiary crushing and screening plant with a capacity matched to Phase I. This plant was to incorporate washing facilities and arrangements for accurately proportioning

arrangements for accurately proportioning graded aggregates.

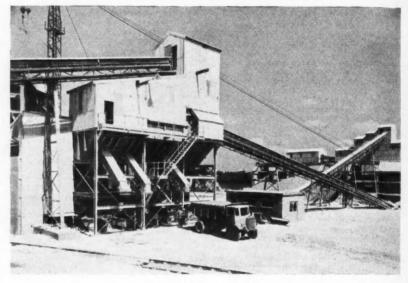
It was stipulated that the plant must be capable of producing 150/200 tons per hour initially, and have an ultimate capacity approaching 250 tons per hour. The primary and secondary crushers were to be sited in the quarry, mid-way between the top and bottom galleries and the stone was to be transported to a surface stockpile of secondary broken stone by conveyors; the stone at this point

veying to a Pegson 60in. by 48in. double toggle, roller bearing jaw crusher built up in sections, having welded plate sides and cast steel front and end sections. A jaw life of over 1m. tons is expected. It is driven by a 225-h.p. 1,000 r.p.m. slip ring motor, and has proved capable of maintaining 250 to 275 tons per hour. Peaks of over 300 tons per hour have been reached.

been reached.

The secondary crusher is a Pegson Telsmith gyratory breaker, Model 20B, but with the concaves set in to reduce the top opening to 18in.

This crusher is separated from the primary by a short belt which is just of



Aggregate selector station

was expected to be 4½in. down. Provision was to be made for recovery from stockpile for ultimate conveyance to the tertiary plant. Although the initial cost of conveyors would prove greater than wheeled transport with this siting arrangement, working costs were expected to be considerably lower.

The primary crusher consists of a 50-ton capacity rock hopper followed by a Pegson 5ft. by 12ft. heavy duty plate feeder con-

sufficient length to accommodate an electronic tramp iron detector. A small surge box is provided beneath the primary, feeding the interconnecting conveyor belt. The purpose of this surge box is to contain up to 10 tons of stone which might

ontain up to 10 tons of stone which might be in the jaws of the crusher during an emergency stop of the conveyor belt carrying the stone to the secondary.

Secondary broken stone is taken from the 20B by a series of three 30in. conveyor belts, approximately 900ft. in toal length, to a secondary stockpile, holding about 1,000 tons of live stone, contained in a natural gulch at the old point of access to the quarry.

Approximately minus 4½in. in size, the secondary broken stone is recovered from beneath the stockpile by a series of 36in. by 72in. Lockers electric vibrating feeders. These deliver the stone to a recovery belt which in turn transports the material to the Phase II scheme.

Construction Work

Construction Work

With the decision to erect the primary crusher house on a ledge to be formed at the north-west end of the quarry, the actual site had to be blasted out to conform to the dimensions of the house. In actual site had to be blasted out to conform to the dimensions of the house. In order to do this, including the making of short roads to the crusher house entrance and to the tipping point of the primary hopper, 56,000 tons of stone had to be excavated. In a rock with no natural beds or planes of cleavage, this proved an exacting task and experience gained in preparing the site showed that it might well have proved easier to have erected a free standing house built up from the quarry floor. Great skill and care was required to shape the rock to conform to the various levels, within the final house. The rock was blasted out with black powder and much of the work had to be



Dumpers unload at primary crusher

uilt des A

.m. ble ur.

son but the

the

ec-

to

ght гу-

om

or th, ut

he in.

to

iry

n-In ng he ad ral

an

ht ed he as to

done simultaneously with erection of part of the building. A new road also had to be constructed to provide access for heavy wheeled vehicles into the quarry. This was a major quarrying operation, involving removal of nearly 100,000 tons of clay and rock.

The primary and secondary crusher house is constructed entirely in precast concrete and designed to accommodate blasting shocks. The wall panels and roof are of adequate thickness to withstand damage from flying stone up to 6in.

are of adequate thickness to withstand damage from flying stone up to 6in. diameter.

Over the primary crusher itself the house is 45ft, high but the column lengths were reduced progressively by terracing the column footings in the rock levels.

The primary and secondary crushers are housed at different levels in the one building and a 20-ton electrically operated gantry has been installed over the primary with a 10-ton electrically operated gantry over the secondary. In both cases heavy parts may be lifted and transferred to a maintenance bay within the building. In order to be out of range of blasting the line of the conveyors follows the side of the quarry and the trestle pads were constructed on solid rock ledges ranging from the primary crusher house to the secondary stockpiling area.

The secondary broken stone is stockpiled in a natural gulch. This was improved by casing the sides with in-situ concrete and in the valley of the gulch an existing tunnel was extended by 120ft. for recovery purposes. In-situ concrete construction was used for the wall and floor and precast concrete units for the roof.

Prior to the installation of Phase I the

Prior to the installation of Phase I the loading plant in the quarry consisted of one 19 R.B. excavator, one 38 R.B. excavator, one Smith 14 drop ball, 30 Blondin skips, and one fork truck.

Now the quarry face plant consists of two 38 R.B. excavators, one Smith 14 drop ball, and four 10yd. Euclid dump trucks.

Notwithstanding the need for extra men on Euclid haulage, labour has been reduced by 25 per cent.

With the old plant it was necessary to fire 800 pop-holes a day. The need for these has been almost completely eliminated by the larger crusher and by intensive use of a drop ball.

Phase II

Early in 1959 selected contractors were invited to tender for the second phase of

the project.

Briefly, Phase II was to be complementary to Phase I as a tertiary crushing; screening; stockpiling; washing and stock recovery unit.

Resonance screens discharge each size

into its appropriate bay at the selector station. Each bay is approximately 30ft. wide and is divided by concrete panels built into the main frames of the present

outre that the main frames of the present concrete supporting structure.

The screens are mounted on the precast concrete frames some 37ft. above ground level. Thus each bay forms an open sided stockpile with the exception of the fine and coarse dust bays where precast concrete silos are provided for storage to prevent contamination. The whole structure is 236ft long.

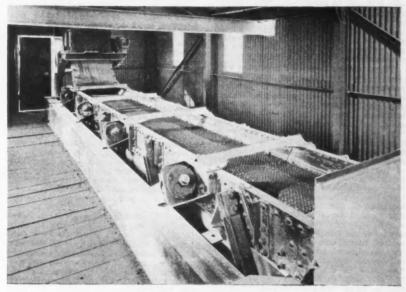
vent contamination. The whole structure is 236ft. long.

In order to provide high grade concrete aggregates and filter media a washery is located in the loading belt circuit with a system of by-pass chutes and flap valves, remotely controlled by electric thrusters from the loading station which enables the operator to either wash the material or load it dry. or load it dry.

The lorry loading station is equipped

was the largest single project. It was necessary first to take out a cutting on the site to accommodate the recovery tunnel

Running gravel and sand were encountered and some difficulty was experienced in excavating a cutting because of continual filling-in behind the backacting excavator. It also became apparent that this type of ground was unsuitable to carry the load of the tunnel and the precast structure supporting the tertiary screening unit. Therefore, it was necessary to excavate to a bed of stiff blue clay beneath the gravel and to construct two reinforced longitudinal concrete sleepers over the whole length of the 240ft. excavation, with off-sets to support the precast concrete posts of the screening unit which concrete posts of the screening unit which flanked the tunnel. In carrying this out, considerable redrainage was undertaken to



Screening process

with an electronic console, by the use of which the operator is able to recover single or graded sizes from the stockpiles in preselected volumetric quantities. in preselected volumetric quantities. Lorries and railway ballast wagons may both be loaded at the one point.

Excavation Difficulties

The screening and stockpiling structure

drop the water table some 10ft. and stabilise the ground.

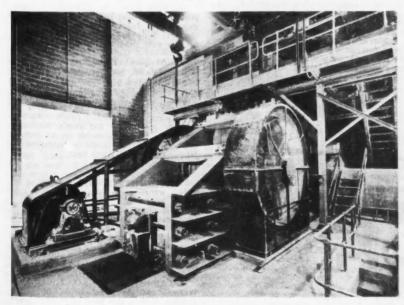
All the precast posts, trusses and beams were cast in the company's concrete works and the whole of the framework was erected in the three months May to July,

The settling pond is 150ft. long by 30ft. wide by 12ft. deep and was excavated by dragline. It is fed entirely by the natural collection of water and as the water table is fairly high no shortage of water has been experienced. Water is taken from the settling pond at the end nearer the washing station by a Pegson centrifugal 5in. pump driven by a 60-h.p. electric motor, which delivers clean water to the washing screen at 60 p.s.i. The dirty water is returned by gravity to the lower end of the pond in a 9in. concrete pipe drain and because of the length of pond no weirs are necessary to settle out fines.

Designers and Contractors

All the civil engineering work in the two All the civil engineering work in the two phases of the scheme was designed and executed by the staff of The Croft Granite, Brick and Concrete Co., Ltd. The main contractors for Phase I were Pegson, Ltd., Coalville. Leics., and for Phase II were Sheepbridge Equipment, Ltd.

Among the principal sub-contractors were the following: (Phase I) Electrical installation — Electrical Equipment Co.. Ltd.; switchgear — G.E.C., Ltd.; electric motors — Brook Motors, Ltd.; vibratory feeders—Lockers (Engineers), Ltd.; (Phase II) electrical installation — Crompton Parkinson, Ltd.; electric motors—Crompton Parkinson, Ltd.; electric motors—Crompton Parkinson, Ltd.; vibratory feeders—Lockers (Engineers), Ltd.; resonance screens—Wests (Manchester), Ltd.



Primary crusher

Talking of Safety by "DRAGEE"

EXPERIENCE tells us that there is no such thing as absolute safety, and therefore it is a relative term: a matter of degree. When we make the assertion that a certain condition or situation is "safe" we can only mean that, to the best of our knowledge and belief, it is not likely to be a cause of harm to anybody.

harm to anybody.

This, of course, is not quite the same thing as saying "I don't know of any reason why it should be dangerous." This negative statement might simply imply ignorance or indifference, and it will do nothing to inspire genuine confidence. Nobody should say "this is safe" unless he is competent and sufficiently well-informed to make the pronouncement with proper authority.

These observations were prompted by a question put forward by one of my colleagues at a recent meeting. Someone had remarked that the expressions "reasonably safe." "fairly safe" and so on were legitimate statements of fact. It would be quite in order to say, for instance, that "the wall of the trench had been made reasonably safe by timbering," simply because it was impossible to take every possible circumstance into account. What of the hidden faults? The unsuspected perils? Who can gauge the true nature of the ground beyond the wall of the excavation? Or the possibility of some obscure weakness in the timber itself? Without direct knowledge, these things must be considered and either dealt with or discounted as reason and experience demands. "Should we not, then," said my friend, "assert only that the place of work is reasonably safe, in just the same manner as when I say that my car is reasonably safe for a weekend trip after considering the condition of the brakes, the steering and the tyres?"

The difficulty, I think, only arises when we use the word "reasonable" too loosely. We tend to equate it with ideas connoting "sub-standard" or "moderate." We say "by taking this or that action we will have a reasonable chance of success" when we ween that we are not altogether happy about the prospects. "Reasonably good" is only "rather good." In its strictest sense, "reasonable" should imply the fact that one's conclusions are based upon an accurate process of reasoning from true premises.

It is a principle of Common Law that the These observations were prompted by

It is a principle of Common Law that the "Dragee," who is a practising safety engineer, would welcome subjects for discussion in this column. All names of persons mentioned in these discussions are entirely fictitious. Questions of law are expressed as the author's personal opinions and are not claimed to be authoritative.—Editor. employer should take every reasonable care for the safety of his workmen—and, indeed, for the safety of other persons lawfully coming within the orbit of his operations—and one of the tests of what is reasonable is "foreseeability." If some particular hazard is foreseeable, then effective action must be taken to deal with it Foreseeability in this sense is a property it. Foreseeability in this sense is a property of the hazard itself, and it does not depend merely upon the knowledge or alertness or diligence of the employer or his agent. Thus, it is no excuse if the employer of a man who has met with an accident were to say: "I was aware that the ladder was defective, but I didn't think anyone would be fool enough to use it." Foreseeability takes into account the follies and frailties

takes into account the follies and frailties of human nature, and the wise employer is expected to know that persons sometimes act rashly. Why they behave like that is a matter for the department of psychology; it is sufficient to know that they do so. "Foreseeability" is sometimes called "reasonable expectation," and in considering what is or is not dangerous the Courts have provided the following rule: "A part of machinery is dangerous if it is a possible cause of injury to anybody acting in a way in which a human-being may reasonably be expected to act in circumstances which may reasonably be expected to occur." By paraphrasing the opening part of this sentence, the rule may be usefully adapted to almost any article or piece of construction on the any article or piece of construction on the

site.

The law recognises that certain require-The law recognises that certain requirements must be limited according to their practicability: that is to say, they are only obligatory where they are feasible, and here again the measure of practicability depends upon the nature of the operation and not upon the state of willingness or otherwise of the employer. For example, whenever work has to be done at the end of a wall the working platform shall, whenever practicable, extend at least 24in. beyond the end of the wall. (Building Regulation 23.) Fair enough. But what happens when a fitter has to examine, repair or lubricate a lifting appliance at a height of more than 6ft. 6in.? So far as is reasonably practicable,

lifting appliance at a height of more than 6ft. 6in.? So far as is reasonably practicable, a safe means of access shall be provided. So it appears that in certain circumstances the employer is entitled to measure the risk to the workman against the inconvenience and expense to himself, but it is well to remember that the employer can only avail himself of this proviso when the risk is insignificant in relation to the sacrifice involved.

This is indeed a difficult computation. How far can a known risk of any degree be justified? How accurately can we gauge its consequences?

its consequences?



SLOW-DOWN IN HOUSING APPROVALS

ANSWERING questions on the effects of the Government's recently announced economy measures on the housing programme, Mr. Henry Brooke, Minister of Housing and Local Government, said that at the end of June local authorities and new towns in England and Wales had 123,000 houses and flats under construction, 4,600 more than a year ago. Many of them were complaining that shortages of building labour were delaying completions. The first thing, therefore, was to get these finished, and also the 47,000 in tenders approved, but not yet started. He would slow down the rate at which he approved further tenders, particularly in areas where housing needs appeared less urgent, but he could not say by how much it would be necessary to do so.

Mr. Swingler criticised the Government for not taking action to stop luxury building and the diversion of building labour to office blocks.

The Minister replied that he was anxious to continue the large-scale housing programme. Severe measures against speculative building were almost certain to slow that down.

His concern with the houses was to get the large number of houses now under construction finished as soon as possible. Everyone knew that half a house was of no use to anybody.

Mr. Brooke assured M.P.s that "the first priority-slum-clearance-shall carry on Hospital Building

In reply to questions on the effect of the economy measures on the hospital capital development programme, the Minister of Health, Mr. Powell, said the allocations to individual hospital boards for 1962-63 would remain as already announced.

House of Commons Accommodation

The Minister of Works announced that in view of the economic situation the scheme to provide additional accommodation in the roof space over the Committee rooms upstairs in the House of Commons at an estimated cost of £500,000 had been postponed.

Truro Hospital

In reply to a question, the Minister of Health, Mr. Powell, said bills of quantities for the new hospital at Truro were nearly ready. Tenders would be invited as soon as the working drawings and bills of quantities had been approved.

Road Expenditure

Mr. Holt asked the Minister of Transport what was the estimated annual expenditure from Exchequer funds over the next five years on which he was basing his five-year plan for new road construction.

tion.

Mr. Marples: Expenditure in 1962-63 will be £90.5m. and will increase annually to give a total of approximately £540m. over the five years ending 1966-67.

Last July I informed the House of a substantial increase in the provision for motorways and classified roads. We now propose to expand the trunk road programme. This will enable us to increase the work on trunk roads by approximately 50 per cent. from April next.

ARCHITECT FOR R.I.C.S. REBUILDING

The Council of the Royal Institution of Chartered Surveyors have appointed Mr. Denys Lasdun and Partners, 3 Albany Terrace, London, N.W.1, to be consultant architect for rebuilding on the site of the Institution at 11 and 12 Great George Street, London, S.W.1.

Mr. Alfred Harris, D.S.O., F.R.I.C.S., of Widnell and Trollope, Broadway Court, London, S.W.1, has been appointed quantary surveyor for the scheme.



"I've got a feeling this will be a case for the 'In' Patients' department!"

e, n-al der o. at ng as 00 ed.

nt dto

W

rer ng 10-

63 lly m.

PERTH REDEVELOPMENT

St. John's Square Scheme Opened

THE St. John's Square redevelopment project in Perth, launched some

three years ago, was recently opened by Lord Provost John T. Young.

Bounded by the Meal Vennel, High Street, King Edward Street and South Street, King Edward Street and South Street, the one-and-a-quarter-acre site involved older property which encumbered a valuable central position. Perth Town Council proposed redevelopment and invited competitive designs. They awarded the first prize of £450 to Herbert G. West and Robert E. G. Miller, students at the Glasgow School of Architecture, who then formed a partnership with the St. John's Square redevelopment as their first commission.

The basic conception involved retention of the traditional Scottish features and atmosphere adapted to modern requirements. That intention has been very fully satisfied in the finished work which provides two enclosed garden squares, canopied shopping surrounds, perimeter roadways with commercial and residential facilities on the upper floor. The square nearer the Meal Vennel is completely enclosed; that fronting on to King Edward Street is open to that street, incorporates the older King Edward Mercat Cross within the garden layout and shows the inner square through a handsome colon-The basic conception involved retention within the garden layout and shows the inner square through a handsome colonnade; on this frontage an imposing clock tower has been used as a focal point, it also provides access to the upper residential storeys and the balconies overlooking the inner square. The tower also provides service facilities and carries the communal TV aerial.

Residential Accommodation

Residential accommodation involves 12 Residential accommodation involves 12 flats and 15 maisonnettes, overlooking the inner square on the second and third floors of the blocks surrounding the inner square, three private offices on the Meal Vennel frontage as well as a major commercial suite within the central block. There are 12 shops at ground level. Protective canopies have been provided for shoppers and pram ramps have similarly been used for convenience of mothers using prams. On the King Edward Street frontage parking space for 20 cars is in-cluded; servicing of commercial properties is done from the perimeter roads. Two adjoining proprietors will link their own developments, a store on High Street and a car garage and showroom on King Edward Street through into the new St. John's Square scheme.

Traditional Materials

Constructional interest lies in the use of traditional materials to harmonise with the architecture of the city centre. Tall narrow pitched gables of Scottish tradition have been retained as terminal points; the clock tower is traditional in design although modern in its execution. Cladding materials are again traditional using granite, smooth faced in some frontages and variegated in colour and surface texture in terminal blocks. Dressed slate slabs have been used to give panelled contrast to the grey granite. Fenestration has

been varied considerably to prevent any

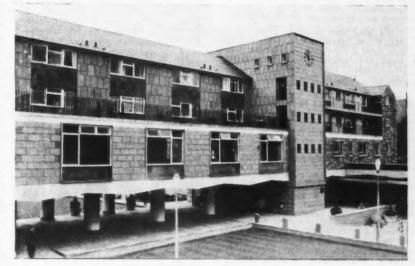
been varied considerably to prevent any sense of monotony.

Construction involved the sinking of about 100 concrete piles to a depth of 25ft., to take the structural steel which was then clad in concrete. Solid granite blocks, relieved by slate slabs, were used for the second storey and synthetic stone for the two upper residential storey cladding. For terminal blocks, multi-coloured granite building blocks of random size were used.

Buffed terrazzo surrounds were used to give bulk to the colonnade pillars while also providing service ducts. Underfloor warming is used throughout and the scheme is an all-electric one.

The marriage of old and new is best illustrated in the selection of slim modern lighting pillars for the internal square, using the same design which was incorporated in the new Tay Bridge recently completed. Completely modern in conception and finish, these pillars still link most effectively with the materials and patterns of older years.

Main contractors for the scheme were Arnott McLeod, Ltd.



Colonnade looking from central square

PAYMENTS FOR VARIATIONS Motorway Contractor Attacks Ministry's System

SPEAKING at the recent opening of the Doncaster Motorway, Mr. A. T. B. Shand of Cubitts-Fitzpatrick-Shand, contractors for the Motorway, said that obviously the Ministry of Transport who held the purse strings should be consulted before necessary variations were paid for but unless the system was altered they would find that no company, however large, would have no company, however large, would have sufficient resources and finance to build

sufficient resources and finance to build the motorways.

"This motorway has presented more than the usual difficulties that one associates with a contract even of this size," said Mr. Shand. "We have struggled through adverse ground conditions, and the deplorable so-called summer of last year, and I believe that great credit is due to the men who completed this motorway before August Bank Holiday.

"It is impossible to carry out a large undertaking of this nature without running into conditions and meeting problems not envisaged in the contract. Under the contract the engineer must fix new rates for the variations and new items of work that occur during the construction. It would be madness to construct motorways without taking advantage of the knowledge and experience gained on similar works in this

country, and other countries of the world. Therefore, when these variations are made, we, the poor people who actually carry out the work, and pay our men and suppliers, must have the knowledge that the engineer can create a new rate for the changed item of work, preferably before the work is done, but in any event very soon afterwards. Equally, it would be ridiculous for us to hold up the work waiting for new prices to be fixed, for if we did it would take many years to complete a motorway. We must, therefore, and indeed we are bound by our contract, to do everything in our power to finish these contracts within the contract period.

Engineer's Authority

Engineer's Authority

"Although we have had happy relations

"Although we have had happy relations throughout with the engineer (Col. S. Maynard Lovell) named under the contract, he has not the full authority as defined under the contract. I consider this to be a very unsatisfactory arrangement both from his and the contractor's point of view. "In contracts of this nature—indeed, practically any contract of today—prompt decisions and actions are essential if economy in production costs is to be obtained. If these conditions are not obtained because of the 'system', it is the 'system' that must take the blame for the higher costs that have resulted, and will

continue as long as the 'system' con-

Mr. Shand told the Minister of Transport, Mr. Ernest Marples, who opened the motorway:

motorway:

"We have received very congratulatory remarks from your high-level technical officials on the way that this contract has been carried through. We are glad to acknowledge these but praise does not pay for wages, plant and materials.

"If we, the contractors, had used the contract clauses in the way that they are being used at St. Christopher House, you would not have been called upon to open this important road for at least another six months."

C.M.P.E. PLANT EXHIBITION

Change of Date

The plant exhibition and demonstration originally planned by the North West branch of the Contractors' Mechanical Plant Engineers to be held on August 31 is now to take place on September 29/30. The exhibition and demonstration is to be held at the T. A. Training Ground, Aigburth Road, Liverpool, 17, in co-operation with the Commander of 24 Army Engineer Group, Col. A. J. Le Seelleur, O.B.E.

Further details may be obtained from the branch seoretary, Mr. C. Leach, 5 Haymans Green, West Derby, Liver-pool, 12.

Men and Movements

THE first chairman of the Commission for the New Towns, which comes into being on October 1, will be Sir Duncan Anderson, until recently chairman of the Federal Power Board of Rhodesia and Nyasaland, responsible for the construction of the Kariba project.

Thomas Smith and Sons (Rodley), Ltd., are obtaining direct representa-tion from the the factory in the north eastern area, which covers part of North Riding and Durham and Northumberland. by the appointment of Mr. E. P.

Cook as resident sales representative for these



E. P. COOK

We have been asked to point out that Mr. C. W. Matthewman, who has been appointed a director of Roadstone (Northwest), Ltd., retired from the chairmanship of Trinidad Lake Asphalt Co. (North Western), Ltd., in January, 1960.

British Insulated Callender's Cables, Ltd., have appointed Mr. J. Large, winding wires divisional manager, as general manager, winding wires division. He will be responsible to Mr. E. Bowyer, executive director, for the administration of the division and the operation of the Huyton Quarry, Melling and Bessbrook (Northern Ireland) factories.

Parkinson Cowan, Ltd., have announced that Mr. G. C. S. Greenhead, F.C.I.S., M.B.I.M., who joined the company two years ago, has been appointed to the board of directors.

The general sales and service manager of Wm. Lewis (Tractors), Ltd., formerly Wm. Lewis (Agricultural House), Ltd., is Mr. J. H. Jones.

Two new executive directors have been appointed to the board of The Cape Asbestos Co., Ltd. They are Mr. L. C. Dawson, F.C.A., responsible for the group's engineering division; and Dr. R. Gaze, B.Sc., F.R.I.C., the group's chief scientist. The board of the company (which under the decounterlies in a formula the decounterlies of Lengung this scientist. The board of the company (which under the decentralisation of January this year became the holding company for the whole Cape group), now consists of Mr. Giles Newton (chairman), Mr. R. H. Dent (deputy chairman and managing director), Mr. G. Courtauld, Lord Elton, Mr. R. St. G. Riley, Mr. S. D. H. Pollen, Mr. T. Muir Warden, Mr. Dawson and Dr. Gaze.

Mr. J. A. Bowker, formerly general manager of the building equipment division of Scaffolding Great Britain (Holdings), Ltd., and Mr. C. H. Vaughan, formerly manager of the scaffolding contracts division of the firm, have been appointed to the board of the operating company, Scaffolding (Great Britain), Ltd.

New members of the Royal Fine Art Commission, succeeding Mr. Louis de Soissons and Sir Arthur Richmond, whose terms of office have expired, are Professor Richard L. Davies and Sir Edward W.

Mr. P. H. Rev-Mr. P. H. Rey-nolds has recently joined J. D. Trac-tors, Ltd., Wind-sor, as area sales manager for west and central Lon-don and Middle-sex. Before this appointment, Mr. Reynolds was technical sales sales representative for Ernest Doe and Sons, Ltd., who hrestocking dealers for John Deere-Lanz equip-



P. H. REYNOLDS

The vice-chairman of Head Wrightson and Co., Ltd., Mr. Peter Wrightson, was among passengers recently arriving at Southampton from New York.

Holophane, Ltd., have announced the following changes in their sales engineering representation: Mr. S. E. Harris, Dip. M.I.E.S., a senior lighting engineer for many years, has been appointed to special sales engineering duties in the London area; Mr. G. D. Deacon has moved to a territory within the home counties where he will operate as sales engineer. His former territory in the east Midlands, based on Nottingham, will now be administered by Mr. W. B. Valentine.

Mr. G. B. Gibson, manager of Road Rollers, Ltd., and Mr. J. R. Cruickshank, C.A., have been appointed directors of the company, Mr. C. F. Lawrence King having

Mr. Michael Arden-Brown has been appointed a senior representative by W. C. Youngman, Ltd., to succeed the late Mr. Arthur Collins.

Mr. Robert F. Earley and Mr. A. Douglas de Vine have announced that their association terminated by mutual consent on August 1, 1961, and on that date Mr. de Vine commenced practice in his own name at Ewell, Surrey. Mr. de Vine will act as consultant to the firm of Robert F. Earley and Partners for specific structural projects. tural projects.

Mr. John O. Bridgman has been appointed sales engineer, Unimog department, in the commercial division of Mercedes-Benz (Great Britain), Ltd. He will be responsible for marketing the Unimog range of all-purpose mobile power units throughout the United Kingdom.

(Concluded from page 689)

content, and classification tests are being made on various subgrade soils, the crushing strength of the lean concrete base is being determined and on the concrete for being determined and on the concrete for the road slabs the flexural and crushing strength of the lean concrete base is being determined and on the concrete for the road slabs the flexural and crushing strengths and elastic moduli are being measured. The workability and air con-tent of the wet concrete will be measured and wet analyses made to check its pro-portions. portions.

The performance of the road as shown by the crack surveys and other measure-ments will be analysed in relation to the design variations to enable conclusion to be reached. It is expected that observa-tions on the road will continue for a period of 10 and 20 years.

Contractors

The main contractors are Robert McGregor and Sons, Ltd., Chesterfield. Sub-contractors: bridges—Simon Carves, Ltd.; concrete carriageways—R. Costain, Ltd.; excavation—Shellabear Price, Ltd.; asphalt surfacing—Wirksworth Quarries, Ltd.

Ltd.
The County Surveyor, Kesteven (Lincs.)
C.C. is Mr. R. R. Dalton, B.Sc., M.I.Mun.E.

Municipals' Visit

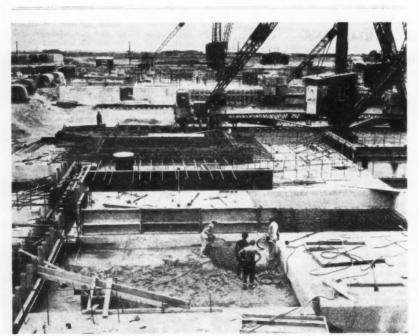
Members of the East Midland District were welcomed to the site by Mr. Norman Jeffrey, deputy county surveyor, Kesteven, who introduced the directors of the main contracting firm, Mr. R., Mr. W. J., and Mr. David McGregor, the agent Mr. F. D. Lebish, the resident engineer Mr. Tinklet and Mr. Burk of the Road Research Laboratory

and Mr. Burk of the Road Researd Laboratory.

At lunch Mr. David McGregor welcomed members on behalf of the main contractors, Mr. M. L. Francis, borough engineer and surveyor, Derby, the district chairman, responding.

The visit ended with a general discussion at the site office which was initiated by Mr. C. K. Tallack, county surveyor, Lindsey, after he had welcomed Mr. R. R. Dalton, county surveyor of Kesteven, who was only able to join the company towards the end of the meeting.

The general arrangements for the meeting were in the hands of Mr. N. V. Jeffrey, deputy county surveyor, Mr. F. D. Lebish, contractor's agent and Mr. N. Chamberlain, hon, district secretary (Matlock).



Concreting of reactor raft foundations at the 580,000-kW nuclear power station at Sizewell. in Suffolk, which is being built by The English Electric, Babcock and Wilcox, Taylor Woodrow Atomic Power Group for the Central Electricity Generating Board. Work began on April 4, 1961

ring rris,

neer

the

oved His

Road ank

lving

been late

A.

OWI

will truc been part-n of He

ower

being rush ise i

te for shing

being or the ishing being con-isured

pro-

shown asure to the on to serva-

for a

Robert erfield Carves, ostain,

arries.

Lincs.) Mun.E.

District

steven, e main J., and F. D. Tinkler esearch

lcomed n con-h engi-district

cussion ited by rveyor, R. R. R. towards

Jeffrey Lebish berlain

n.

TRENDS OF THE CEMENT INDUSTRY IN EUROPE

DURING 1960, the cement industry of Western Europe continued to benefit from the general expansionary wave, states a recently-published report* by the Organisation for European Economic Co-operation on The Cement

Industry in Europe.

Member countries, states the report, produced about 97m. tons of cement, i.e. 5.6 per cent. more than the year before.

Rate of Expansion

Rate of Expansion

The rate of expansion was appreciably slower than in 1959, but the results for that year were exceptionally good and, considered in the context of the last six years, the year 1960 is in keeping with the constantly rising trend of output.

The countries under review fall in three categories as follows: Countries with an increase definitely greater than the O.E.E.C. average (from 10 to 18 per cent.), i.e. Turkey, Portugal, Ireland, Austria, Greece, the Netherlands, Switzerland and Italy: countries with an increase very close Greece, the Netherlands, Switzerland and Italy; countries with an increase very close to the O.E.E.C. average (from 4 to 6 per cent.) i.e. Norway, the United Kingdom, Germany and Denmark; and countries where the difference, in one direction or the other, is very slight (less than 2 per cent.), i.e. France, Spain, Sweden and the B.L.E.U.

Total production constitution in the contraction of the country of the

Total production capacity in the cement industry in member countries at the end of 1960 amounted to 109,700,000 tons, about 7,200,000 tons more than at the end

about 7,200,000 tons more than at the end of the previous year.

This increase was obtained as follows: About 500,000 metric tons through new works; 200,000 metric tons through new kilns in existing works; and 500,000 metric tons through improvements in plans other than kilns (after allowing for kilns closed down).

Labour Force

In 1960, the average labour force employed in the European cement industry "The Cement Industry in Europe, 1960," published by the Organisation for European Economic Co-operation. Price 6s.

was approximately 109,600, about 1,000 less than a year before.

This figure is the net result of sizeable losses and gains for workers and for clerical and executive staff respectively. There were 1,600 fewer workers, but the clerical and executive strength increased by about 640.

The differing trend in the number of workers and that of clerical and executive staff, already apparent for some years, affords evidence of increasingly greater mechanisation and rationalisation in the cement industry.

An increase of 900 in the labour force of the United Kingdom is quoted in the report as being among the biggest changes that have taken place over the period 1958-59 in the labour pattern of the member countries. ber countries.

Exports and Imports

Exports and Imports

After a continuous decline since 1955, European cement exports in 1959 showed a definite improvement which might have been regarded as beginning of a new trend, but the results for 1960 did not confirm this assumption. Exports have not only made no progress, but have even dropped by 6 per cent. The setback has affected exports to non-member countries only (—16 per cent.), trade with member countries having, in contrast risen by 15 per cent.

The member countries total imports of cement, practically all of which represented trade between member countries, amounted in 1960 to 1,917,000 tons, making an increase of 64,000 tons, or 3 per cent.

per cent.

In 1960, trade in clinker between member countries amounted to 775,000 tons.

Exports to non-member countries were about 280,000 tons, and imports from these countries 8,000 tons.

For all member countries combined, apparent consumption of cement in 1960 was 93.3m. tons, an increase of 6m. tons (6.9 per cent.) compared with the previous year.

year. The 1960 figures for Western Europe as

a whole call for the same comment as was made in connection with the trend of production, namely that the rate of increase was much slower than 1959 but, seen in the context of the past six years, 1960 was in keeping with the upward trend of cement consumption.

rend of cement consumption.

No clearly distinct overall trend can be discerned from the changes in cement prices in each country from the end of 1959 to the end of 1960. In some countries, they remained unchanged, and in others they rose or fell to a greater or lesser degree.

Future Trends

The member countries taken as a whole expect to increase by some 14m. tons their cement production capacity in 1961 and 1962.

In forecasting the trends of cement consumption, the competent bodies of the O.E.E.C. have estimated, states the report, that the gross national product of member countries as a whole should increase by at least 3 per cent. per annum from 1960 to 1965. Obviously, an even higher rate may be obtained; 3½ per cent, or more is not impossible. However, it seems wiser, in a forecasting exercise, to err on the cautious side. It must, moreover, be remembered that the elasticity of demand may possibly decline slightly by 1965, so that an increase of over 3 per cent, in the gross national product might be partially offset by a slight drop in elasticity. For the E.E.C. countries, a slightly higher rate than for the O.E.E.C. was adopted, i.e. 3½ per cent, which must also be considered as a minimum. as a minimum.

as a minimum.

These forecasts are not valid for any given year. They simply indicate the trend which should appear in the coming years, but obviously cannot allow for short-term cyclical variations. They must, therefore, be taken as valid "all things being equal", i.e. provided that any events and changes in the pattern of cement consumption in the coming years are of the same nature as those which occurred from 1950 to 1959.

Finally, these forecasts do not hold good Finally, these forecasts do not not good for any given country either. Elasticities can differ from country to country and a different rate of growth should obviously be adopted for each country.

AIR-CONDITIONING AT COMPUTOR CENTRE

SPECIAL air-conditioning plant has recently been installed at the No. 1 Computor Centre for Barclays Bank, Ltd., at 154 Drummond Street, N.W.1, claimed to be the first centre of its type in the country.

The computor generates a considerable amount of heat, which the air-conditioning equipment was designed to absorb, and at the same time to maintain a suitable temperature.

temperature.
For this purpose 30 individual small air-cooled refrigerator units were installed on the flat roof above the computor room. Each is capable of developing 1½ tons of refrigeration apiece, producing a total refrigeration loading of approximately 50 tons, each ton of refrigeration representing 2.000lb. of ice per 24-hour period.
Refrigerated air is passed into the conditioned air space around the computor through very heavily lagged concealed metal ducting.

through very heavily lagged concealed metal ducting.

By adopting this cooling method, the air-conditioning equipment could be installed without specially reinforcing the roof and it had the considerable advantage of eliminating the requirement for a large plant room and cooling tower, usually associated with this type of installation. Static electric nylon mesh air filters ensure that no dust particles are introduced into the sensitive computor mechanism.

mechanism.

The small separate offices serving the main computor room are also equipped with the latest type of air-conditioning units permitting both heating and cooling to requirement. These are practically

silent in operation and the units develop one ton of refrigeration which is equivalent to 2,000lb. of ice per 24 hours' period. Conditioned air is distributed at high level throughout the building by means of separately designed air diffusing outlets, flush mounted in the false ceiling panels to blend with the general interior decora-

It is believed that this is the first time

that this system of installing individual refrigeration units, for air-conditioning purposes, has been carried out in this country.

The special building for the Computor Centre was designed by Mr. D. L. G. Shuldham, A.R.I.B.A., the Bank's assistant staff architect. Design, supply and installation of the air-conditioning plants was carried out by W. G. Cannon and Sons, Ltd., 38a St. George's Drive, London, S.W.1.



General view of computor centre

Trade and Company News

FIAT INTRODUCE 70-H.P. TRACTOR

GENERAL purpose 70-h.p. tractor, A GENERAL purpose 70-n.p. tractor, of which preliminary details were given in *The Contract Journal*, July 6, 1961, has been introduced by the Fiat Company of Torino, and is being marketed in this country by Mackay Industrial Equipment, Ltd., Feltham, Middx., the sole agents for Fiat tractors in Great Britain in Great Britain.

At 13,000lb., the 70 CI, as the tractor is called, is 500lb. heavier than its predecessor, the 60 CI. An increase in length of track on the ground and slightly greater width ensure low ground pressure and good stability. The grouser height has been increased to 1.15/16in. to secure maximum traction.

Engine

The engine is a 4-cylinder four-stroke direct injection diesel, developing 70 b.h.p. at 1,400 r.p.m. Bore and stroke are 125 x 140mm. and compression ratio 15.5 to 1. Wet type cylinder liners and induction hardened crankshaft supported on five main bearings, are well proved features of the 60 CI engine but a dynamic balancer has been incorporated which will give much smoother running. The main clutch is of the dry single plate type with overcentre engagement. centre engagement.

Full pressure lubrication is supplied by a dual pump in the sump, operating at 36 to 43lb. p.s.i. Cleanliness of the oil is ensured by a screen type filter in the sump, a self-cleaning fin type filter in the

delivery pipes, and a replaceable cartridge by-pass filter.

Two methods of starting are offered. A two cylinder horizontally opposed 10.5-h.p. petrol engine with a 12-volt electric starter can be fitted, or alternatively a 24-volt starter motor engaging directly with the flywheel of the tractor engine can be supplied.

Power steering is a feature, and the controls of the multiple disc steering clutches and brake bands are hydraulically assisted.

Speeds

gearbox, The The gearbox, of the sliding gear type with one train in constant mesh, pro-vides five forward and four reverse speeds. The quick reverse unit, operated by a separate lever. reverse unit, operated by a separate lever, links corresponding forward and reverse gear trains for rapid reversing during dozing. The operating speeds vary between 1.5 m.p.h. in 1st gear and 5.2 m.p.h. in 5th gear (forward) and 1.7 m.p.h. in 1st gear and 4.2 m.p.h. in 4th gear (reverse). Track frames are of rugged construction, the side members being welded box sections carrying five rollers per side. The welded "Y" arms are particularly strong to maintain accurate track frame alignment and absorb the stresses due to slewing. Front suspension is by an equaliser spring with a rebound spring below it.

Mud shields above and below the track frames ensure maximum protection and augment the exceptionally clean lines of the whole design, and the drawbar is of the swinging type with adjustable settings.

The price of the 70 CI, complete with dozer equipment, is £3,990.



BLOCKMAKING PLANT OPENED AT NORTHAMPTON

A BLOCKMAKING plant has recently been opened at Billing, Northampton, by Conbloc, Ltd., Stanton Harcourt, Oxford, the third plant commissioned by the company since its formation two years ago.

Concrete and lightweight blocks are produced at the plant by Multibloc machines, moving along runways, and specially designed stacker trucks move around the site gathering blocks which have become hard enough to be placed in stacks for curing. The plant will serve a 50-mile radius of Northampton.

Conbloc lightweight foamed

blocks have a density of 75-80lb, per cu. blocks have a density of 75-80lb, per cu. ft. and a minimum compressive strength of 400lb, p.s.i. The foamed slab is obtained from blast furnaces and is the residual slag from iron production which is treated with controlled quantities of water while still in molten form. This has the effect of expanding it into a cellular mass of low density while at the same time amendling density while at the same time annealling it. This "artifical pumice" is then crushed and graded for use as a special concrete

and graded for use as a special concrete aggregate.

These foamed slag blocks have a high thermal insulation and fire resistance. Tests indicate that a 4½in.-5in. wall including finishes, will afford four hours' protection from intense fire.

DEMONSTRATIONS OF GRASS **GROWTH CONTROL**

Demonstrations of advances in the chemical control of grass growth and weeds have been given to interested authorities recently by Baywood Chemicals, Ltd., 37-41 Bedford Row, London, W.C.I.

Plots sprayed with grass growth regulator and a selective weed killer over the past four years, in the Bibury area of Gloucestershire, were shown to the visitors. These plots, which have needed no cutting for the past six years, give a level of control at which it is claimed the savings of 50 per cent. in labour costs could be achieved.

Maleic Hydrazide, a product of Whiffen and Son, Ltd., in the form of a water soluble amine salt, is used as the active growth inhibiting agent, making up 25 per cent. of Regulox, often used in association with Vergemaster, a selective weedkiller. By using a mixture of these materials, a combined spraying operation can be carried out for overall control of grass and weed growth.

With this combined mixture, it is claimed.

With this combined mixture, it is claimed, only six hours of dry weather after application is necessary to achieve good results. Good results have also been obtained even after a light rainfall an hour after the spraying operation.

TWO-SPEED AXLES FOR B.M.C. **TRUCKS**

The Austin and Morris 5-ton trucks and 12/15-ton g.t.w. prime movers are now available with a new heavy-duty Eaton two-speed axle, type 13802, in place of the previous type 1350 offered as optional extra equipment

extra equipment.

Features of the axle, the ratios of which remain unchanged from those of the type 1350, include a larger crown wheel and pinion, uprated pinion shaft bearings and considerably increased torque capacity over the preceding model. As a slightly larger axle case is employed, the 13802 differential assembly is not interchangeable with that of the 1350. Prices of the modeis concerned remain unaltered. extra equipment.



Blocks being produced at the Billing plant

XOC The

gn-ew-iser

ack

and cals 1 past ster-

for ntrol f 50

ved

vater ctive per ation

iller. ls, a

med. ppli-sults. even

.C.

and

now

e of

which type and and and acity ightly 13802

eable

Trade and Company News

BRETT'S OPEN READY MIXED PLANT AT ASHFORD

LORD DERWENT, chairman of the British Road Federation, recently performed the official opening of a new ready mixed concrete plant at Ashford, Kent, for Brett's Ready Mixed Concrete Co., Ltd.

Co., Ltd.

The plant is the second to be set up by the company and is designed to produce either wet or dry mixes to meet the demand within a 10-mile radius of the town. It is served by a fleet of 4 cu. yd. Winget Challenge truck mixers on Leyland Super Comet chassis.

Only two operators are necessary on the plant, one to supervise the loading of aggregates at ground level and the other the mixing, which is entirely pneumatically controlled. An output of 40 cu. yd. an hour is possible.

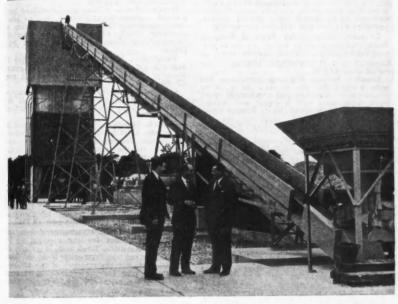
The materials are gravity fed to the mixer and the aggregates are carried to bins at the top of the 62ft, high plant by

three dials. Two are for aggregate and are accurate to 25lb., and one is for cement accurate to 5lb. The batcher has air controlled levers to his immediate front. These control both weighing and discharge of aggregates and cements as well as selection of wet or dry batch chutes for discharge.

chutes for discharge.

To the immediate right of the control panel is a Flo-meter mechanism where the required water amount is selected by button and, when released, automatically runs into the mixer below at the prescribed rate. To the left of the control panel is the starter for the mixer. The batcher has been provided with a set of batching cards which show the amount of water required for each mix, according to the water content of the sand.

On the mixer floor is a two-way chute for by-passing the mixer when a dry mix is wanted. The mixer is a Swedish Feimert



Mr. Timothy Brett, Lord Derwent and Mr. J. H. Snell, seen at the opening of the new Ashford plant

a W. W. Brown conveyor which has a total length of 300ft. and is set at an angle of

18 degs.

A 5 cu. yd. aggregate feed hopper and a feed panel box are placed at the bottom of the conveyor. The feed panel contains a vibrator control dial for regulating the frequency of vibrator according to the material being sent up the belt. Lights show when a bin is full and the position of the distributor chute above the bins. There is a selector dial for the distributor chute so that the aggregate man is in complete control of the head of the plant without seeing it. Four separate sized materials are used at present, namely 1½in., ¾in., ¾in. and sand, the four bins each having a capacity of 15 cu. yd.

Forty tons of cement is stored in three

each having a capacity of 15 cu. yd.

Forty tons of cement is stored in three bins: one containing 20 tons of ordinary Portland cement, one 10 tons of rapid hardening cement and the third, 10 tons of sulphate resisting cement.

Cement delivery is effected by bulk pressurised tanked vehicles which connect to pipes on the side of the plant. The average load of eight tons is pumped to the top of the plant in 30 minutes. A Visco air filter complete with shakers is mounted in each cement bin, the shakers being controlled from the batching plant.

Below the bins on the batching floor are

mixer, made under licence by Winget, Ltd., who were the contractors for the complete plant. The mixer has 12 blades and will mix 2 cu. yd. in 30 seconds.

Built by the side of the plant is a small laboratory where cube tests are carried out on nearly all mixes leaving the plant.

NEW DIADEM EMERALD ELECTRODE

An improved Diadem Emerald electrode for use either as a "contact" or free arc electrode has been produced by Cooper and Turner, Ltd., Vulcan Road, Sheffield 9, for general purpose welding on all thicknesses of mild steel from 14 s.w.g. upwards. The electrode is made in a range of seven sizes from 12 gauge to fin diameter. The deposition time per foot of electrode at maximum current ranges from 55 secs. at 12 gauge to 72 secs. at 6 gauge. Current values are 80 amps. average and 100 amps. maximum at 12 gauge and 195 amps. average and 235 maximum at 6 gauge. The production of fillet welds of mitre profile by contact welding with this electrode is reflected in the figures given for the weight of electrode required to deposit 100ft. of fillet weld, these ranging from 7lb, when the leg length is \$\frac{1}{2}\text{in}\$, through 22lb. at \$\frac{1}{2}\text{in}\$.

BRITISH STANDARDS

Internal combustion engines (spark ignition type) (B.S. 765: 1961)

There are now three British Standards for general-purpose internal combustion engines: B.S.649—diesel engines; B.S.3109—gas and dual fuel engines; and B.S.765—

—gas and dual fuel engines; and B.S.765—spark ignition engines. When B.S.765 was first published in 1938 it was entitled "Internal combusion engines, carburettor type." The carburettor, then universal, is now sometimes replaced by fuel injection, spark ignition being retained. The title and scope of the standard have accordingly been changed. changed

Instead of basing engine rating on a 12-hour running period, the revised standard introduces the basis of continuous running (limited only by overhaul requirements). In this change the standard is in line with the other two specifications for internal combustion engines. Since B.S.765 is intended to cover engines with a wide range of duties, three intermittent ratings are included. The single class of governing specified in 1938 is now replaced by two classes.

specified in 1938 is now replaced by two classes.

The foreword to the specification says: "The purpose of this standard is to assist all parties concerned with engine specification and performance to understand one another and to have the same background assumptions in mind. Particularly as regards ratings there has been much confusion in the past as to the true potentialities of an engine under differing conditions of service."

As a contribution towards better understanding the information which should be given by a purchaser when inquiring or ordering, and by a maker when tendering, has been amplified.

The method of assessing the engine rating required for an electrical generating set has been adjusted to a basis closer to the actual values for the average capacities of these engines.

A new appendix has been added to enable the results of

of these engines.

A new appendix has been added to enable the results of tests made at high altitudes, temperatures and humidities to be correlated with standard conditions. Another appendix relates the standard operating conditions and ratings specified in B.S.765 with those operative in the United States, Germany and the U.S.S.R. Copies may be obtained from the British Standards Institution, Sales Branch, 2 Park Street, London, W.I, price 6s. each. (Postage charged extra to non-subscribers.)

GLASS-FIBRE INSULATED CABLE

Flexible glass-fibre insulated cable for use as a light fitting connection has been introduced by British Insulated Callender's Cables, Ltd.

The cable, which is suitable for 250-volt operation, is specially designed to function at the high temperatures likely to be encountered in contemporary lighting fixtures used for illumination in modern office block, large stores and in enclosed show cases.

omce block, large stores and in enclosed show cases.

In its natural state, the glass fibre used for the insulation—treated with a suitable form of varnish binder and filler—will not burn or carry flame. Should the cable be subjected to an external source of heat, with temperatures of up to 180 degrees C. the insulation and conductor remain intact, permitting a continued flow of electricity.

FOLD BACK GARAGE UNIT

R. Vickers Todd and A. R. Dawson, 40 Crescent Road, Burgess Hill, Sussex, have patented a vertical fold back garage, which they call the Carquad.

they call the Carquad.

This consists of a series of tubular frames hinged to a joint plate and clad with a tough plastic sheet or similar material, with the frames counterbalanced. The end frame is fitted vertically to a house wall or to fencing posts, or when in back-to-back pairs, to purpose party posts. When down, the bottom frame is clipped to a retaining stud and can be locked. The same clip can retain it in a vertical position.

Current Constructional Activities

PROJECTS CONTRACTS AWARDS

THIS editorial feature provides readers I with a comprehensive news service covering forthcoming private and public construction work. Commencing on this page information is given concerning future projects followed by details of tenders being invited. In the third section will be found news of tenders recommended for acceptance, tenders accepted and contracts awarded. Attention is also drawn to the advertisements covering contracts and appointments appearing in the front part of the Journal.

BUILDING AND DECORATING

(See also Housing Schemes)

Aldington, Kent.—C.C. recommended to apply for sanction to borrow £6,969 for the erection of a retained fire station.

Aylesford, Kent.—Co. E.C. have approved for inclusion in the 1961-62 programme, subject for the provision of three additional classrooms in permanent construction at The County Primary School. Estimated cost

coms in permanent construction at the County Primary School. Estimated cost £17,000.

Beshill-on-Sea, Sussex.—B.C. recommended of appoint Fleetwood, Eversden and Partners. Terminus Road, Eastbourne, as quantity surveyors for the erection of a slaughterhouse.

Bestley, Kent.—Co. E.C. have approved, for inclusion in the 1961-62 programme, scheme for the conversion of cloakrooms and ancillary accommodation at Hillsgrove County Primary School, into three additional classrooms. Estimated cost £8,000.

Birmingham. — Regional Hospital Board

School, into three additional classrooms. Estimated cost £8,000.

Birmingham. — Regional Hospital Board recommended to approve in principle, schemes for the modernisation of wards at Hollymoor Hospital and provision of male students' accommodation at Monyhull Hospital, estimated cost £16,000 and £25,000, respectively; improvements to the pathological laboratory at Marston Green Maternity Hospital, £18,900; visitors' waiting hall and toilet accommodation at the Skia Hospital, George Street, £700; extensions to the pathological laboratory at Little Bromwich General Hospital, £54,400; include in capital programme schemes for conversion of former paediatric ward to lyingin ward at Dudley Road Hospital, general practitioner unit at Yardley Green Hospital and improvements to the Chest Clinic, £6,719, £3,200 and £1,210, respectively.

Birmingham.—City Council recommended to approve the replacement of hutted classrooms and provision of additional staff accommodation at Eochill House Bernard Home and

Birmingham.—City Council recommended to approve the replacement of hutted classrooms and provision of additional staff accommodation at Forhill House Remand Home and erection of headmaster's house at Shawbury Approved School. Estimated cost £23,350 and £3,430, respectively.

The City Council recommended to lease land for the erection of industrial premises as follows: At Ward Street to Joseph Gloster. Ltd., 33-34 Hockley Hill; fronting Hospital Street—H. C. Haselgrove and Sons, Ltd., 19-21 Nelson Street; Upper Gough Street—Birmingham Garages, Ltd., Navigation Street; Upper Gough Street—Hoffmann Manufacturing Co., Ltd., 75 New Street; Hunters Vale, Hockley—Rex Nicholls, Ltd., Hunters Vale, Hockley—Rex Nicholls, Ltd., Hunters Vale, Hockley—Rex Nicholls, Ltd., 133-134 New John Street; Vauxhall Road—Birmingham Typesetters, Ltd., 133-134 New John Street; Vauxhall Road—W. Gill and Co., Ltd., Pershore Works, Wheeley's Lane.

Harry Bloomer and Son, 73 Hagley Road, Five Ways, Edgbaston, are the architects for the erection of buildings as a bacon and food processing factory east of Chester Road, for Marsh and Baxter, Ltd., and warehouse premises in Holloway Head/Florence Street, for E. Coaney and Co., Ltd.

Brenzford and Chiswick, Middx.—B.C. recommended to prepare detailed drawings

Brenzford and Chiswick, Middx. — B.C. recommended to prepare detailed drawings for the reorganisation of the public departments at Chiswick Library; approve scheme for the demolition and rebuilding of the public convenience at the Market Place. Estimated cost £4,200.

Bristol.—Planning Committee have granted outline approval for a new store at 60-66 East Street. Bedminster, for Marks and Spencer, Ltd.; plans for an assembly hall at Anchor Road, for the Bristol Cathedral School.

City Council have approved scheme for making the structure of Ashton Court weatherproof. Estimated cost £20,000.

Bromley, Kent.—Co. E.C. have approved, for inclusion in the 1961-62 programme, schemes for the provision of two hutted classrooms at the Princes Plain County Primary School site, estimated cost £3,000 and an additional woodwork room at the technical school for boys. £5,000.

Burton on Trent, Staffs.— Birmingham Regional Hospital Board recommended to include in the capital programme, scheme for extension to club house at Andressey Hospital. Estimated cost £2,000.

Bushey Heath, Herts.—C.C. recommended to approve, subject to Ministry approval, scheme for the extensions to the infants' school. Estimated cost £20,000.

Caterham, Surrey.—C.C. recommended to approve plans for the construction during 1961-62 of a craining centre at Chaldon Koao. Estimated cost £37,405.

Estimated cost £37,405.

Cheshunt, Herts.—C.C. recommended to approve, subject to Ministry approval, plans for the erection of an instalment of the Flamstead End Infants' School and second instalment of the Goffs Oak J.M.I. School. Estimated cost £11,400 and £21,100 respectively.

Coverty—Bigningham Regions! Heogist.

ted cost £11.400 and £21,100 respectively.

Coventry.—Birmingham Regional Hospital Board recommended to include in the capital programme scheme for mortuary extension at Coventry and Warwickshire Hospital. Estimated cost £3,640.

Crawley, Sussex.—Planning permission has been granted for the erection of a filling station, showroom, car and commercial spare parts department and a repair and service workshop at High Wood, Three Bridges Road, for Gilbert Rice, Ltd., architects for the scheme are Godman and Kay, 13 North Parade, Horsham.

parts department and a repair and service workshop at High Wood, Three Bridges Road, for Gilbert Rice, Ltd., architects for the scheme are Godman and Kay, 13 North Parade, Horsham.

Crowborough, Kent.—C.C. recommended to approve scheme for the re-organisation of the sanitary accommodation, electrical rewiring and fire precautions at Pinewood Children's Home. Estimated cost £3,750.

Croydon, Surrey.—B.C. recommended to apply for sanction to borrow £300,000 for the construction of a multi-storey car park at Fairfield and tenders are to be invited shortly for the scheme; approve the erection of an abattoir at the Factory Lane Depot site; approve the demolition of Rectory Manor building maintenance depot and Factory Lane highways depot and the erection of new depots to the west of the transport depot.

Town Planning Committee have approved outline application for the erection of a synagogue and classrooms at 30 Elmwood Road, for the Federation of Synagogues, c/o 24 Spareleaze Hill, Loughton, Essex; approved, subject to conditions, plans for the erection of showrooms and office block at Trojan Works, Purley Way, for Trojan, Ltd.

Doncaster, Yorks.—Parker and Roberts, 37 Silver Street, Lincoln, are the architects and

showrooms and office block at Trojan Works. Purley Way, for Trojan, Ltd.

Doncaster, Yorks.—Parker and Roberts, 37 Silver Street, Lincoln, are the architects and K. H. Bole, 32 Carr Street, Sleaford, Lincs., the quantity surveyor for erection of an hotel-motel off the A.614 Blyth-Nottingham Road, for Joshua Tetley and Son, Ltd., and Pathfinder Motels, Ltd. Estimated cost £150,000.

Gavin Paterson and Son, 147 West Regent Street, Glasgow, are the architects for conversion of the Odeon Cinema, Hallgate, into bowling alley for the Rank Organisation, Ltd. Estimated cost £50,000.

Flamstead, Herts.—C.C. recommended to approve, subject to Ministry approval, scheme for the completion of the J.M.I. School. Estimated cost £15,000.

Gravesend, Kent.—Co. E.C. have approved, for inclusion in the 1961-62 programme, scheme for the provision of a building science laboratory and workshoo/garage at the technical college. Estimated cost £3,500 and £2,500 respectively.

C.C. recommended to approve the erection

respectively.

C.C. recommended to approve the erection of a hut to provide additional dormitory accommodation at the fire station. Estimated cost £1,450.

Great Yarmouth, Norfolk.—East Anglian Regional Hospital Board have appointed Ollev and Haward, 5 Queen Street, as architects for construction of sanitary annexe, dayroom and main entrance for ward 7 and enclosed veranda for ward 1 at Northgate

Guildford, Surrey.—B.C. recommended to appoint Jones, Lang, Wootton and Sons, 16 King Street, London, E.C.2; and W. Eve and

Sons, Prudential Buildings, Epsom Road Guildford, as joint consultants for the redevelopment of the central area; approximately Road

Hereford. — Birmingham Regional Hospital Board recommended to include in the capital programme, scheme for minor operating theatre at the General Hospital. Estimated re at the £8,000.

cost £8,000.

Hertford.—C.C. recommended to approve, subject to Ministry approval, sketch plans for the erection of a secondary modern school and youth wing at Sele Farm. Estimated cost £293,716.

£293,716.

Hadham, Herts.—C.C. recommended to approve, subject to Ministry approval, the erection of an agricultural science laboratory at Hadham Hall S.M. School. Estimated cost 2,300.

E3,500.

Hatfield, Herts.—C.C. recommended to approve, subject to Ministry approval, extensions and adaptations to the technical college. Estimated cost £12,500.

Havant, Hants.—Planning Committee have granted, subject to conditions, outline planning permission for a new police station at Rimleigh Road, adjacent to the proposed Havant Civic Centre and new Crown Post Office.

Office.

Hoddesdon, Herts.—C.C. recommende approve, subject to Ministry approval, e sions to the modern school. Estimated £20,000. -C.C. recommended to

C.C. recommended to approve the erection of a drill tower and the extension of the drill yard at the fire and ambulance station. Estimated cost £6,250.

Ipswich, Suffolk.—Tenders to be invited in six months time for the erection of a bakery for Messrs. Cranfields. H. A. Halpern and Partners, are the architects and J. Playle the quantity surveyors, both of 58-60 Cannon Street, London, E.C.4. Estimated cost £70,000-

Street, London, E.C., £100,000.

Kent.—E.C. have approved, for inclusion in Kent.—E.C. have approved for the pro-

£100,000.

Kent.—E.C. have approved, for inclusion in the 1961-62 programme, scheme for the provision of five additional lecture rooms in hutted construction and the conversion of the geography room into a science laboratory at Stockwell College. Estimated cost £8,250.

Leeds.—City Council recommended to approve layout plans for the erection of 20 garages at Raynville Road and 30 garages at Brooklands and negotiate with West and Sons (Leeds), Ltd., for the erection of the garages; to approve plan for the erection of an aged persons' hostel with a block of multi-story flats.

flats.

City Council recommended to appoint G. Alan Burnett, architect, 8 Blenheim Terrace, for the preparation of bills of quantities and working drawings, and Rex Proctor and Partners, 15 Blenheim Terrace, as quantity surveyors in connection with phase 2 of scheme for the erection of Seacroft Civic Centre. Tenders to be invited for phases I and 2.

and 2.

City Council have approved amended sketch City Council have approved amenueu secsion plans for the erection of a maternity and child welfare and school clinic at Seacroft. City Architect instructed to invite tenders. Estimated cost £28,300.

Lenham, Kent.—C.C. recommended to apply for sanction to borrow £6,300 for the erection of a retained fire station.

Lenkengen RC will carry out essential

tion of a retained fire station.

Lewisham.—B.C. will carry out essential works for improvements to Forest Hill baths as a first stage of a comprehensive redevelopment. Work now proposed will include new locker and changing room at north pool, modernisation of toilets and tiling of wall of north pool. Estimated cost £17,231.

B.C. recommended to purchase and erect a cedar wood single-storey building for use as a book store in the grounds of Louise House. Estimated cost £1,700.

Lincoln.—Tenders to be invited in three

House. Estimated cost £1,700.

Lincoln.—Tenders to be invited in three months time for the erection of shops, offices and a supermarket for the Shop Construction Group. H. A. Halpern and Partners are the architects and J. Playle, the quantity surveyor, both of 58-60 Cannon Street, London, E.C.4. Estimated cost £100,000.

Loose, Kent.—Co. E.C. have approved for inclusion in the 1961-62 programme, scheme for the provision of three hutted classrooms at the county primary school. Estimated cost £5,000.

Road.

the prove torey small four

Cost

to to

xten-llege.

xtencost ction tion

akery and the

.000

on in

pro-utted ry at ap-

es at Sons ages; aged torey

point

тасе.

Civio Ses 1 ketch and croft. o ap

ential baths relop-

new

erect r use ouise

e the eyor. E.C.4.

d for

ooms cost

Lowestoft, Suffolk.—B.C. recommended to approve plan for a swimming pool on the Esplanade. Estimated cost £100,000.

Maidstone, Kent.—Co. E.C. propose the preparation of plans for the erection of accommodation for the pre-agricultural course at the technical school for boys: have approved for inclusion in the 1961-62 programme, scheme for the provision of two hutted classrooms at the technical college. Estimated cost £2.750.

New Romney, Kent.—Bills of quantities are being prepared for the erection of a church at Baldwin Road, Greatstone, for the Lydd Parochial Church Council. C. P. Griggs, 102 Sandgate Road, Folkestone, is the architect and A. W. Shambrook and Partners, 96 Tontine Street, Folkestone, are the quantity surveyors for the scheme. Estimated cost £7,000.

and A. W. Shambrook and Partners. 96
Tontine Street, Folkestone, are the quantity
surveyors for the scheme. Estimated cost
67,000.

North Riding.—C.C. to invite tenders in due
course for the proposed Ings Farm and
Cotherstone County Schools.
Norwich.—East Anglian Regional Hospital
Board have appointed A. F. Scott and Sons,
23 Tombland, as architects and quantity surveyors for the construction of workshops for
maintenance staff at West Norwich Hospital;
Philip Pank and Partners 15 The Close, as
quantity surveyors for new medical staff
quarters at Norfolk and Norwich Hospital;
Johns, Slater and Haward, 32 Foundation
Street, Ipswich, as architects, Lewis and
Marshall, 62 Sidney Avenue, Cambridge,
quantity surveyors Chas. Weiss and Partners.
I Wandsworth Road, London, S.W.8, structural engineers, and Troup, Bywaters and
Anders, 26 Seymour Street, London, W.I, as
consulting engineers for the erection of new
headquarters for the Board.

Orpington, Kent.—Co. E.C. have approved
for inclusion in the 1961-62 programme,
scheme for the provision of six hutted classrooms at the girls' secondary school site.
Estimated cost £10,000.

Paddington.—B.C. recommended to appoint W. V. Zinn and Associates, Collingham
House, Eagle Street, Southampton Row,
London, W.C.1, as consulting engineers for
the foundations and superstructure of the two
tower blocks proposed at Braithwaite Place
and Adpar Street.

Portsmouth.—City Council to apply for
sanction to borrow £5,000 for erection of a
new building to replace the existing cafe at
Canoe Lake, Southsea.

Rugby, War.—Birmingham Regional Hospital Board recommended to approve in
principle, scheme for the provision of a nonresident staff changing room at St. Luke's
Hospital. Estimated cost £1,725.

S. Albans, Herts.—City Council recommended to appoint S. G. Rose, 10a Chequer
Street, St. Albans, as the quantity surveyors
for improvements to 42/44 and 48/56 Fishpool
Street and invite tenders in due course from
a selected list of contractors for the scheme.

St. Albans, Herts.—City

mended to invite tenders for the provision of a pavilion at Park Street recreation ground. Estimated cost £3.500.

Salford, Lancs.—City Council recommended to apply for sanction to borrow £8.850 for erection of garages on housing estates.

Sedgefield, Dur.—Sketch plans have been prepared for stage two of the new male staff hostel at Winterton Hospital, for Newcastle Hospital Board.

Smethwick, Staffs.—B.C. recommended to prepare plans for the erection of a branch library in the Price Street Shopping Centre with a block of flats over the administration part of the building.

Sudbury, Suffolk.—East Anglian Regional Hospital Board have appointed L. N. Hyams 29 Elm Street, Ipswich, as quantity surveyor for the construction of a mortuary and postmortem room at Walnuttree Hospital.

Sunderland.—Rae and Partners, 5 Green Terrace, have been appointed quantity surveyors by the B.C. for the erection of six shops on the Hylton Red House estate, and six on the Grindon Village estate.

Thedwastre, Suffolk.—R.D.C. have approved in principle the erection of three bungalows at Steeles Road, Woolpit.

Tonbridge, Kent.—C.C. recommended to apply for sanction to borrow £76.000 for the erection of stage 2 of the new buildings at Hugh Christie Secondary School.

Warwick.—Birmingham Regional Hospital Board recommended to include in capital programme, scheme for a recreation room for patients at the Central Hospital, Hatton, and extension to medical staff quarters at Warwick Hospital. Estimated cost £6.000 and £1.500, respectively.

Winchester, Hants.—Co. Planning Committee have granted permission, subject to

respectively.

Winchester, Hants.—Co. Planning Committee have granted permission, subject to conditions, for the erection of a hotel on the car park, adjacent to Winchester Cathedral, for Trust Houses, Ltd. Architects for the scheme are Fielden and Mawson, 71a The Close, Norwich.

DEMOLITION

Salford, Lancs.—City Council recommended to apply for sanction to borrow £2,440 for demolition of the existing covered way at the Ordsall flats, and replacement thereof by a brick wall.

ELECTRICAL

Douglas, I. of M.—B.C. have approved the installation of traffic signals at Avondale Corner. Estimated cost £1,500.

Luton, Beds.—B.C. recommended to invite tenders for the installation of a lift at "The Mount"

Mount". Wandsworth.—B.C. recommended to approve installation of traffic control signals at Wandsworth Road at the junction of Union Road and Stewarts Road. Estimated cost £2.922.

FENCING

Croydon, Surrey.—B.C. recommended to apply for sanction to borrow £1,665 for the erection of 6ft, high unclimbable iron fencing along the footpath at the east side of Croham

GAS AND WATER SUPPLY

GAS AND WATER SUPPLY

Atcham, Salop.—R.D.C. propose the construction of reservoirs at Charlton Hill, Wroxeter and Bull Farm, Kenley.

Chichester, Sussex.—City Council recommended to apply for sanction to borrow £1,105 for the installation of an additional meter and meter house pressure control valve and sluice valves, connections to existing mains, etc., in connection with the city water supply.

Croydon, Surrey.—B.C. recommended to approve the construction of a 20,000-gallon underground water tank at Old Town fire station. Estimated cost £2,200.

HEATING AND VENTILATING

Chatham, Kent.—Co. E.C. have approved for inclusion in the 1961-62 programme, scheme for the improvement of the mechanical ventilation system at Medway College of Technology. Estimated cost £2,640.

HOUSING SCHEMES

Bristol.—Planning Committee have approved outline plans for an 11-storey and a 5-storey block of flats including 10 shops and 59 maisonnettes at Barton Hill.

City Council have approved scheme for two blocks of old people's dwellings at St. Nicholas Road, St. Paul's and Kennard Road, St. George. Estimated cost £34,000.

Pagamearus Words—Rigmingham Regional

St. George. Estimated cost £34,000.

Bromsgrove, Wores.—Birmingham Regional Hospital Board recommended to include in the capital programme, scheme for a bungalow for the matron of Bromsgrove Cottage Hospital. Estimated cost £3,900.

Bromyard, Heres.—R.D.C. have approved in Downham. Planning permission not yet the erection of 18 dwellings at Stoke Lacy.

Croydon, Surrey.—B.C. recommended to approve outline application for the erection of 16 flats and 11 garages at 9 and 11 Ashburton Road, for H. W. West and Sons, Ltd., 139 Shirley Road, Croydon.

Downham, Norfolk.—Barker Bros., 84 Bexwell Road, propose the erection of 30 houses in Downham. Planning permission not yet granted.

in Downham. Planning permission not yet granted.

Eccles, Lancs. — B.C. recommended to approve layout plan for erection of 58 three-bedroom houses on land adjoining gun site, Peel Green.

Epsom and Ewell, Surrey.—B.C. are preparing working drawings for the erection of 12 flats at Ruxley Farm estate.

Greenwich.—B.C. recommended to appoint G. F. K. White, Hayton and Adderley, 38-39 Parliament Street, London, S.W.1, as the quantity surveyors for the Nadine Street housing scheme; appoint Everson and Searles, 237 Westcombe Hill, London, S.E.3, as the architects for redevelopment of the Wellington Gardens housing site.

Guildford, Surrey.—B.C. recommended to invite tenders for the erection of 134 houses at Park Barn; prepare working drawings and speciely the street of the rection of the precision of

Guildford, Surrey.—B.C. recommended to invite tenders for the erection of 134 houses at Park Barn; prepare working drawings and appoint W. V. Zinn, Longdene, Haslemere, as consulting engineer for the erection of two blocks of flats at The Mount.

Harrogate, Yorks.—B.C. have granted planning permission for the erection of a five-storey block of flats comprising fourteen self-contained units and thirteen garages in Spring Grove/Springfield Avenue for J. Waddington (Builders), Ltd., Kirby Hill, Borough Bridge, and erection of eight pairs type A eight pairs type B and six pairs type C semi-detached bungalows on the Woodfield estate. for J. Sandever and Son, Ltd., 3 Mayfield Grove, Harrogate.

Kidderminster, Wores.—B.C. recommended to approve layout of the Hurcott Road clearance area, including an 11-storey block of flats, six-storey blocks of flats and four-storey maisonnettes

Leeds.—City Council recommended to authorise City Architect to negotiate with G. Wimpey and Co., Ltd., for the erection of 36 maisonnettes, 14 houses and 23 garages at Theaker Lane and 46 flats in one 12-storey block, 16 maisonnettes, 14 houses and 55 garages at Beckett Park; to approve layout plan for development of an area of land at Whinmoor providing for the erection of three blocks of 12-storey flats, 232 maisonnettes, 16 bungalows, four flats over garages, 196 houses and 580 garages.

City Council recommended to invite tenders from selected contractors for partial rectifica-

City Council recommended to invite tenders from selected contractors for partial rectification scheme and remedial works at Quarry Hill flats. H. W. Dowe. consulting engineer, City Chambers, Infirmary Street, Leeds, 1. Estimated cost £343,000.

Lewisham.—B.C. recommended to invite tenders for 18 flats and eight garages at 9, 10 and 11 Eliot Park

Mildenhall, Suffolk.—R.D.C. have approved amended plans for bungalows off Wings Road, Lakenheath.

St. Ives. Hunts.—B.C. recommended to approve the sufficiency of the sufficienc

Wings Road, Lakenheath.

St. Ives. Hunts.—B.C. recommended to appoint M. W. Fellows, 37 High Street, Huntingdon, as quantity surveyor for the erection of 40 dwellings.

Stoke-on-Trent, Staffs.—Planning and Development Committee have approved plans for multi-storeey flats in Bucknall-New Road area. Estimated cost £1½m.

Tor multi-storeey hats in Bucknail-New Road area. Estimated cost £1½m.

Woking, Surrey.—C.C. recommended to conversion of Carberry, Kingfield Road, into three nurses' flats and a district room and the erection of three garages. Estimated cost £4,000.

PLAYING FIELDS, PARKS, ETC.

PLAYING FIELDS, PARKS, ETC.

Chislehurst and Sidcup, Kent.—Co. E.C. have approved for inclusion in the 1961-62 programme, scheme for the extension of playing field area at Dunkery Road, etc. Estimated cost £7.000.

Croydon, Surrey.—B.C. recommended to submit to M.E. for approval, scheme for the provision of a playing area at Shirley Court estate, for use by Shirley Secondary School. Estimated cost £10.000.

Lowestoft, Suffolk—B.C. recommended to

Lowestoft, Suffolk.—B.C. recommended to approve the provision of two new grass tennis courts and the improvements for existing ones. Estimated cost £15,000.

RIVER AND FLOOD PREVENTION WORKS

Kent.—C.C. recommended to appoint Lewis and Duvivier, 14 Howick Place, London S.W.I. and Edward Sandeman, Kennard and Partners, 171 Victoria Street, London, S.W.I. as joint consulting engineers, and apply for sanction to borrow £1,703,000 for improvements and alleviation of flooding along the River Ravensbourne.

ROADS, BRIDGES AND SITE WORKS

Burton Latimer, Northants.—C.C. recommended to approve amended scheme for the minor improvement of bend on the London-Carlisle trunk road (A.6) at the war memorial in Burton Latimer. Estimated cost £5,000

Carlisle trunk road (A.6) at the war memorial in Burton Latimer. Estimated cost \$5,000.

Croydon, Surrey.—B.C. recommended to apply for sanction to borrow £44,000 for the preparation of Greystone Lime Works. Merstham, for controlled tipping of refuse. including the construction of an access road from Shepherd's Hill and the provision of drainage; prepare for submission to Ministry for approval detailed plans for the improvement of the junction of Cherry Orchard Road/Addiscombe Road and Altyre Road during 1962-63, estimated cost £193,000; approve and in due course submit to Ministry for approval, scheme for the provision of a carpark at Norbury Park; proceed with improvement of Pitlake Bridge and Handeroft Road and diversion of Factory Lane.

Dorking, Surrey.—C.C. have submitted to M.T. for grant aid scheme for the improvement of the London-Worthing road (A.24) between London Road (A.2003) and the Maidstone-Guildford road (A.25). Estimated cost £31,500.

Eccles, Lancs. — B.C. recommended to approve plans for reconstruction of bridge over Worsley Brook in Grange Road.

Guildford, Surrey.—M.T. have requested C.C. to undertake the construction of a pedestrian subway under Deerbarn Bridge which carries the Guildford By-pass (A.3) over the railway. Estimated cost £5,000.

B.C. recommended to approve plans and invite tenders for the making-up of Poltimore Road (part), Downside Road and Boxgrove Avenue.

Kent.—C.C. recommended to raise no exhibition to M.T. for grant plant and the provision to the control of the contro

Kent.—C.C. recommended to raise no objection to M.T.'s proposals for the construction of a trunk road from the existing route A.2 near Hoath Lane, Gillingham, to the route of the Medway motor road, for

the purpose of facilitating access between the Gillingham area and the motor road.
Roads Committee have approved following schemes for the improvement of the trunk roads A.2, A.20 and A.259: (1) provision of a temporary connection from route A.2 at Summer Hill, Harbledown, to the Canterburging road and A.2 diversions, £2,900; (2) improvement of sight line at junction of route A.20 and road leading to Lenham sanitorium, £5,506; (3) widening of carriageway of route A.20 and improvement of visibility between Scllindge Church and Duke's Head public house, £16,840; (4) improvement of S bend on route A.20 west of The Motel at New Inn Green, £14,000; (5) improvement of junction of route A.20 with minor road at Horse and Groom public house, Stanstead, £15,000; (6) widening of route A.259 for approximately one mile between Brookland and Brenzett, £37,000.

£37,000.

Middlesbrough, Yorks.—B.C. recommended to approve scheme for widening of Ferry Road, incorporating the provision of an omnibus turning circle. Estimated cost £6,000.

Northamptonshire.—Roads and Bridges Committee are preparing plans for the improvement of the Oxford-Stamford trunk road (A.43) at its junction with Southwick Road at Bulwick

(A.43) at its junction with Southwick Road at Bulwick
Shropshire.— M.T. have authorised the construction of a diversion of the Shrewsbury-Market Drayton road to allow runways at R.A.F., Shawbury, to be extended for the Air Ministry. Estimated cost 551,000.
C.C. have approved the improvement of the Shrewsbury-Ellesmer road near Little Harlescott Lane. Estimated cost £15,000.
Stourport, Worcs.—Co. Highways and Bridges Committee have approved scheme for widening and improving Wilden Lane. Estimated cost £70,000.
Thanet, Kent.—C.C. recommended to apply

widening and improving Wilden Lane. Estimated cost £70,000.

Thanet, Kent.—C.C. recommended to apply for sanction to borrow £1,200 for the construction of car parks at the Technical college.

Whitstable, Kent.—C.C. recommended to approve detailed plans for the provision of a continuous service road on the south side of Thanet Way, A.299, between Clover Rise and Chestfield Road. Estimated cost £26,300.

Worcestershire.—Ministry have approved C.C.'s routing of a 50ft. wide motorway through the village of Clent.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Birmingham.—City Council recommended to approve schemes for reconstruction of Hockley main sewer in Aston Brook between Chester Street and near to New Town Row and sewerage works in the Calthorpe Park comprehensive development area. Estimated cost £213,000 and £14,500, respectively.

mated cost £213,000 and £14,500, respectively.

Croydon, Surrey.—B.C. recommended to approve in principle long-term scheme for the alleviation of flooding in the following areas: (1) Chaffinch Brook, estimated cost £100,000; (2) River Wandle—(a) Central Croydon, £275,000, (b) main river course, £350,000 and (c) Brighton Road, £175,000; (3) Mitcham Road, £350,000; (4) Norbury Brook—(a) main brook course, £600,000 and (b) branch sewers, £150,000.

Dorking, Surrey.—C.C. recommended to approve in principle U.D.C.'s main drainage scheme for the Box Hill area. Estimated cost £95,000.

Dorking and Horley, Surrey.—C.C. recom-

Scheme for the Box IIII aug. 255,000.

Dorking and Horley, Surrey.—C.C. recommended to approve in principle R.D.C.'s main drainage scheme for part of the village of Buckland. Estimated cost £15,000.

Epsom and Ewell, Surrey.—B.C. recommended to invite tenders from selected contractors for the construction of surface water sewers in the Stoneleigh and Worcester Park sewerage relief scheme. Estimated cost

Haslemere, Surrey.—C.C. recommended to approve in principle U.D.C.'s main drainage scheme for the Hindhead and Churt Road area. Estimated cost £232.000.

Kettering, Northants.—C.C. recommended to approve in principle R.D.C.'s Harrington sewerage and sewage disposal scheme. Estimated cost £19.750.

Shipston-on-Stour, War.—R.D.C. have approved a sewerage scheme for the parishes of Shipston, Halford, Tredington and Honington. including the enlargement of the Fell Mill sewage disposal works, Estimated cost £172.000.

Wellington, Salop.—R.D.C. have sub-

172.000.

Wellington, Salop. — R.D.C. have submitted to C.C. for planning permission, schemes for the construction of a sewage disposal works adjoining the Shropshire Union Canal and a pumping station at Moorhead. Preston; and sewage disposal works at Sytch Lane, and a sewage pumping station at River Lane, Waters Upton.

Woking, Surrey.—C.C. recommended to approve in principle U.D.C.'s main drainage scheme for the Littlewick Road area of North Horsell. Estimated cost £42,200.

STREET LIGHTING

Edmonton, Middx.—B.C. recommended to apply for sanction to borrow £4,500 and £19,153 respectively for stage VI of the public lighting conversion scheme and for the relighting of Fore Street, New Road and Hertford Road, and Park Avenue, Village Road and Ridge Avenue.

Middlesbrough, Yorks.—B.C. recommended to approve scheme for conversion from gas to electric lighting during 1962/63 of the outer areas of the town south of a line Springfield Road, Burlam Road, Chipchase Road, The Avenue, Eastbourne Road and Marton Burn Road. Estimated cost £50,000.

CONTRACTS

Full details of the Contracts marked will be found in our Advertisement Columns.

BUILDING AND DECORATING
(See also Housing Schemes)

Alnwick, Northumb.—External painting of council houses for R.D.C. (Contract 2/1961)
1-10 Crawley View, Powburn (10 houses);
(3/1961) 1-26 Beech Estate, Shilbottle (26);
(4/1961) 1-10 Curly Lane, Lesbury (10);
(5/1961) 7-16 Sea View, Longhoughton (10);
(6/1961) 16-26 Davison Avenue, Felton (six);
(7/1961) 41-46 Greyfield Estate, Embleton (six); (8/1961) 43, 45, 47 and 49 Acklington Village (four); (9/1961) 9, 10, 11, 12 and 14 Northside, Shilbottle (five); (10/1961) 19, 21 and 23 Davison Avenue, Felton (three); (11/1961) 1-7 Peases Gardens, Alnmouth (seven); (12/1961) 1-4 Town Close and 5-8 Boatman's Place, Newton / Sea (eight); (13/1961) 1, 3, 2, 4 South Lane and 1-28 South View, Felton (32); (14/1961) 1-14 The Oval, Felton (14); (15/1961) 1-29, 31, 33 and 35 Lee Avenue, and 20, 21 and 22 Grange Road, Shilbottle (35); (16/1961) 5-25 Heugh Wynd, Craster (10); (17/1961) 17-28 and 29-40 Greyfield Estate, Embleton (24). Documents from O. M. Farrell, engineer and surveyor, 34 Green Batt, Alnwick. Tenders by Aug. 19.

Armagh.—Design, supply, fabrication and erection of structural steelwork for an advance factory of approximately 18.000 sq. ft, at Armagh, for Ministry of Commerce, Tenderers should note that tenders will not be considered which are not accompanied by steelwork designs. Documents from Room 14, Chichester House, 64 Chichester Street, Belfast 1. Tenders by August 23.

Ballinasloe, Galway, Eire.—Building of a new dining hall and renovations to the existing hospital at the Pines Division, Ballinasloe Mental Hospital Board, Documents from I, R. Boyd Barnett, architect, 5 Camden Place, Cork. Deposit £10 10s. Plans also seen at office of Desmond MacGreevy, quantity surveyor, 4 Merrion Square N., Dublin. Tenders by August 26.

Bedfordshire.—Erection of lean-to bath-rooms and w.c.s together with hot water

Desmon S Merrion S

Desmond MacGreevy, quantity surveyor, 4
Merrion Square N., Dublin. Tenders by
August 26.

Bedfordshire.—Erection of lean-to bathrooms and w.c.s together with hot water
systems at two cottages at Markyate Road,
Slip End. Luton, for C.C. Application to
the County Land Agent, Shire Hall, Bedford,
as soon as possible. Tenders by Aug. 21.

Belfast.—Construction of a factory extension
at Castlereagh Road, for the Ministry of Commerce (Hughes Tool Co., Ltd.), Documents
from the Ministry of Commerce, Room 30B,
Chichester House, 64 Chichester Street. Belfast 1, Deposit £3. Tenders by August 18.

Belfast.—Alterations and extensions to form
a diagnostic centre and the erection of a
caretaker's residence at Greenwood House,
Upper Newtownards Road, for City Council.
Documents from the City Architect's Department, 40 Academy Street, Belfast. 1. Deposit
£2, cheques payable to the Belfast Corporation.
Tenders by September 7 (extension of date).

Biggleswade, Beds.—Erection of five garages
at Stratton Way, for U.D.C. Documents from
the Surveyor, Stratton House, Biggleswade.
Tenders by September 2.

Burnley, Lancs.—Following, for R.D.C.:
(Contract 1), exterior painting of 27 Council
houses at Greenacres. Read; (2), pebble-dashing of six houses in Douglas Way, Briercliffe;
(3), surfacing of 650 sq. yd. of main drive
to Council offices, Reedley, with asphalt; (4),
provision and laying of approximately 300
sq. yd. of concrete flags and provision of
fencing at 52 to 70 Whalley Road. Sabden:
(5), laying of approximately 1,600 lin. yd. of
6in. diameter pipe sewer, manholes,
etc., at Fence Gate, within the Parish of Old Laund
Booth; (6), laying of approximately 3,500
lin. yd. of 6in. diameter pipe sewer, manholes,
etc., within Parishes of Dunnockshaw and
Habergham Eaves; (7), demolition of 35, 37,
39, 41 and 43, Halifax Road, Lane Bottom.
Briercliffe, Documents from the Engineer and
Surveyor, Council Offices, Reedley, Burnley,
Deposit £5 5s., per contract. Tenders by
August 15.

Cheshire.—Alterations and additions to Runcorn Police Station (approximate value £7,500), for the Police Authority, Applications to Edgar Taberner, architect, County Hall, Chester immediately, Deposit £2 2s., payable to the Cheshire Police Authority and crossed Westminster Bank Limited, Drawings seen at the office of District Architect, District 2, 24 Nicholas Street, Chester, Tenders by September 1.

ber I.
Cork, Eire.—Improvements to Mitchelstown
Convent National School, for the Office of
Public Works, Documents from the Secretary,
Office of Public Works, 51 St. Stephen's Green,
Dublin 2. Deposit £1, specification, etc., exhibited at the residence of Very Rev. J. Canon
O'Keeffe, Mitchelstown. Tenders by Septem-

hibited at the residence of very nearly Canon O'Keeffe, Mitchelstown. Tenders by September 7.

Dundonald, Down.—Design, supply, fabrication and erection of structural steelwork for an advance factory of 70,000 sq. ft. at Dundonald, for the Ministry of Commerce. Tenderers should note that Tenders will not be considered which are not accompanied by steelwork design. Documents from Room 14, Chichester House, 64 Chichester Street, Belfast, 1. Tenders by August 22.

Failsworth, Lancs.—Erection of the Robert Sidlow public library, which has a floor area of 4,350 sq. ft. and is semi-prefabricated in construction, with brick gables and wing walls, light-weight roof and precast concrete flooring, for U.D.C. The contract which includes drainage, garden works, and dwarf stone walling is to be completed by April 30, 1962. Documents from John Walton, clerk of the Council, Town Hall, Oldham Road, Failsworth, near Manchester. Deposit £5 5s., plans seen at the office of the Engineer and Surveyor, Town Hall, Tenders by August 23.

Gateshead, Dur.—Extensions to The Cedars Special School, for B.C. The contract con-

veyor, Town Hall. Tenders by August 23.

Gateshead, Dur.—Extensions to The Cedars
Special School, for B.C. The contract consists of the provision of a single-storey block
containing two classrooms, staff room, toilete,
etc., adjoining the existing building. Submit
names, together with details of work recently
carried out, to the Borough Surveyor, Municipal Buildings, Swinburne Street, Gateshead,
by Aug. 21. Deposit £5, payable to Gateshead
Corporation.

carried out, to the Borough Surveyor, Municipal Buildings, Swinburne Street, Gateshead, by Aug. 21. Deposit £5, payable to Gateshead Corporation.

"Great Yarmouth, Norfolk.—Demolition and rebuilding of the jetty and sea water pump house, for B.C. Deposit £2 2s. Tenders by September 6.

Hull.—Erection of a three-storey building comprising shops, showrooms, etc., at 20/30. Brook Street, Kingston upon Hull., for City Council. An access road and car park are included. Documents from H. F. Alston, town planning officer, Guildhall, Kingston upon Hull. Deposit £5 5s. payable to the City Treasurer. Tenders by August 29.

Huntingdonshire. — Following, for C.C.: County Buildings, Medical Block—extension of existing timber hut and provision of waiting room; Gazeley Cottage—adaptation to office including decorations, Documents from S. M. Holloway, county architect, County Buildings, Huntingdon. Tenders by August 21.

Inverness-shire. — Additions and alterations to Kilmonivaig P. School for C.C. The works comprise concrete and brick, carpenter and joiner, plumber and drainage, plaster and cement, painter and electrical works. Applications to County Architect, The Castle. Inverness, by Aug. 19.

Liverpool.—Renewal of wood floors; electrical upgrading; repairs to roads and pathways; at Sefton General Hospital, for the South Liverpool Hospital Management Committee, Documents from Garnet Chaplin, secretary to the Committee, Sefton General Hospital, for the South Liverpool, 15. Tenders by Aug. 17.

Londonderry.—Tenders are invited from makers of prefabricated portal frame structures for the supply and erection on prepared foundations of one shed, 165ft, long and 92ft, wide, at Brandywell Showgrounds, for B.C. Outline sketch and brief specification of requirements obtained on application to the Housing Architect, Housing Department, Police Court Street, Londonderry. Tenders by Sept. 2.

Loughgall, Armagh.—Construction of new potato store and alterations to existing silo

V Sept. 2.

Loughgall, Armagh.—Construction of new otato store and alterations to existing silot the Manor Farm, for the Ministry of inance. Documents from Room 103, Law ourts Building, Belfast 1. Tenders by ugust 17.

Courts Building, Belfast 1, renuers 2, August 17.

Maltby, Yorks,—Improvement and repair of five houses in Farquhar Road, for U.D.C. Documents from G. H. Davis, Council's architect, Council Offices, Rotherham Road, Maltby, Tenders by August 19.

Manchester.—Supply, fixing and glazing of: (a) Steel windows and aluminium curtain walling and the supply of; (b) aluminium doors to civic centre shops, Wythenshawe, for City Council, Documents from City Architect. P.O. Box 488, Town Hall, Tenders by August 23.

Merthyr Tydfil, Glam.—Alterations and extensions at Georgetown Secondary and Infants Schools, for B.C. Documents from the

Borough Architect, Town Hall, Merthyr Tydfil. Deposit £l. Tenders by August 16.

Northern Ireland.—External repainting of:
(a) 156 dwellings and 2 garages at Cregagh (section 1); and (b) 210 dwellings and 6 garages at Cregagh (section 3), for the Northern Ireland Housing Trust. Documents from Offices of the Trust, 12 Hope Street, Belfast 12. Tenders by August 18.

Nottingham.—Erection of six shops with flats over on the Bestwood Park housing estate, for City Council. Applications to E. W. S. Martin, the estates surveyor and valuer, The Guildhall, Nottingham, by first post August 15. Deposit £2 2s., payable to Nottingham Corporation. Tenders by September 12.

Oundle, Northants.—Erection of 12 garages.

Nottingham Corporation. Tenders by September 12.

Oundle, Northants.—Erection of 12 garages at New Road, for U.D.C., comprising the provision of concrete bases, forecourts and road accesses, and the erection of garages utilising prefabricated concrete structural components with corrugated asbestos roofs and brick cladding to outer walls, Documents from R. E. T. Chinnery, surveyor, 6 North Street, Oundle. Tenders by September 11.

Poole, Dorset.—Erection of 50 permanent beach huts in traditional brick construction, at Branksome Dene Chine stage 1, for B.C. Details from the Borough Architect. Municipal Buildings, Poole. Deposit £2 2s. Tenders by August 23.

Port Talhot, Glam —Erection of three reinselvents.

Buildings, Poole, Deposit 22

Port Talbot, Glam.—Erection of three reinforced concrete structures, each consisting of two beach kiosks and shelter at the Aberavon promenade, for B.C. Documents from G. V. Griffiths, Borough Engineer, Municipal Buildings, Port Talbot. Deposit £2 2s. Tenders by September 17.

Poston, Lancs.—Reinforced concrete bored

ings, Port Talbot. Deposit £2 2s. Tenders by September 17.

Preston, Lancs.—Reinforced concrete bored piling to foundations, for the refuse disposal transfer station, Argyll Road, for B.C. Submit names to the Borough Engineer and Surveyor, Municipal Buildings, Preston, by August 31.

Roscommon, Eire.—Erection of a new factory at Roscommon. Documents from J. Colman Healy, quantity surveyor, 46 Upper Mount Street, Dublin. Deposit £10 10s. Tenders by August 25.

Rutherglen, Lanarks.—Erection of a public convenience at Castle Street, for B.C. Applications to John C. Russell, Burgh Surveyor, Town Hall Buildings, Rutherglen, by August 14.

on

C.: ng in-M. gs,

ect,

lin.

re-the

new silo

r of D.C. chi-tby.

s to City P.O.

Town Hall Buildings, Rutherglen, by August 14.

Strabane, Tyrone.—Construction of new office building at Dublin Road, for the Ministry of Finance. Documents from Room 103, Law Courts Building, Belfast 1. Deposit £5. Plans also seen at Ministry of Labour and National Insurance. Local Office, Bishop Street, Londonderry. Tenders by September 4.

Sutton and Cheam, Surrey.—Demolition, drainage, construction of precast concrete buildings, retaining walls (concrete), concrete slabs and yard surfacing, at Cheam Park Nursery Depot extension, for B.C. Documents from C. Needham, borough engineer and surveyor, Municipal Offices, Sutton. Deposit £2 2s, cheques payable to Council. Tenders by September 1.

Sutton-in-Ashfield, Notts.— Erection at

cheques payable to Country
September I.

Sutton-in-Ashfield, Notts. — Erection at
Mansfield Road, Sutton-in-Ashfield, and Mansfield Road, Skegby, of new public conveniences each of approximately 4,000 cu. ft. air
space, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, Forest
Lodge, Station Road, Sutton-in-Ashfield, Deposit £2 2s., each scheme. Tenders by September 8.

Lodge, Station Road, Sutton-in-Ashfield, Deposit £2 2s., each scheme. Tenders by September 8.

Wandsworth.—Conversion of large residential property. Submit names giving details of experience, plant and technical and supervisory staff available, together with names of two technical and two financial referees to J. Noel Martin, town clerk, Municipal Buildings. Wandsworth, S.W.18, by August 17. Bills of quantities will be issued to selected contractors in due course. Drawings may be examined at the Borough Engineer and Architect's Department at this address.

West Hartlepool, Dur.—Extension to the existing steel deck overhead tipping platform at the destructor, Burn Road, for B.C. Documents from the Borough Engineer and Surveyor, Municipal Buildings, West Hartlepool. Deposit £5. Tenders by September 2.

West Riding.—Repairs to caves gutters at the Armthorpe Boys' Secondary and Junior Girls' Schools, Mere Lane, Armthorpe, near Doncaster, for C.C. Documents from the Divisional Education Officer, County Area Offices, Station Road, Doncaster. Tenders by Aug. 21.

West Riding.—Construction of brick and timber screen walls, teak seats, etc., at Bentley Sunnyfields Junior School, for C.C. Documents from County Architect, Bishongarth, Westfield Road, Wakefield. Tenders by September 5.

Wexford, Eire.—Work to three roofs at the technical school, New Ross, for the Vocational Education Committee. The work comprises stripping the roofs of their present surfacing,

and the preparation and resurfacing of two of the roofs, with a combined area of 5,000 sq. ft. in new asphalte, together with incidental work to parapets copings, a roof light, etc. The third roof, of 900 sq. ft. in area, is a curved surface over Belfast roof trusses and is to be resurfaced in new felt, with incidental work to eaves, flashings, etc. Documents from C. G. O'Reilly, architect, 12 Upper Ormond Ouay, Dublin, or the Chief Executive Officer, County Hall, Wexford, Deposit £5 5s. Tenders by August 21.

Workington, Cumb. — External painting of 104 houses at Distington for the North Eastern Housing Association, Ltd. Specifications from The Branch Manager, Curzon House, Curzon Street, Maryport.

CLOTHING AND TEXTILES

CLOTHING AND TEXTILES

Belfast.—Supply of following for City
Council: (a) Uniform clothing; (b) waterproof
clothing; (c) protective clothing; (d) caps and
hats, to the several Corporation Departments,
excluding transport department and fire
brigade, during the 12 months commencing
January 1, 1962. Documents from Town Clerk's
Department (Room 7), City Hall, Belfast 1.
Tenders by August 22.

Belfast.—Supply of uniform clothing to
Belfast Fire Brigade during 12 months commencing October 1, 1961, for City Council.
Documents from the Fire Brigade Headquarters, Chichester Street, Belfast 1. Tenders by August 23.

Leeds.—Supply of police uniform clothing,

quarters, Chichester Street, Belfast 1. Tenders by August 23.

Leeds.—Supply of police uniform clothing, caps, helmets, shirts, blouses, collars and ties (mens and women's), gloves, gaberdine rain-coats, mackintoshes, for the year 1962, for City Council. Particulars as to quantities required, the date on which the goods have to be delivered, and the forms of tender may be had on application to Alex J. Paterson, chief constable, Chief Constable's Office, Municipal Buildings, Leeds 1. Styles of garments may be seen at the police clothing stores, 40 Park Lane, Leeds 1. Tenders by September 4.

Rochdale, Lancs.—Supply of protective clothing to the cleansing department, for B.C. Details from Cleansing Superintendent, Entwistle Road, Rochdale. Tenders by August 21.

Salford, Lancs.—Supply of (a) Navy proofed Melton donkey jackets, Navy Melton blouses and trousers; (b) p.v.c. reinforced Terylene or cotton waterproof trousers and coats. Documents on written application, from the General Manager and Engineer, Salford City Transport, Frederick Road, Salford, 6, Lancs. Tenders by Sept. 6.

DEMOLITION

DEMOLITION

Dublin, Eire.—Demolition of buildings at St. Kevin's Hospital, I James's Street, for the Health Authority. Documents from O'Connor and Aylward, architects, 17 Upper Pembroke Street, Dublin. Tenders by August 25.

Leicester.—Demolition and Clearance of 183 properties in Curzon Street, Upper Brunswick Street, Denmark Street, Montreal Road, Stanley Street and Taylor Street, consisting mainly of terraced blocks of houses, for City Council. Documents from John L. Beckett, city surveyor, Town Hall, Leicester. Deposit £1 Is. Tenders by August 24.

Norton-Radstock, Som.—Demolition of the houses and premises at White Hart Row, Fosseway Clandown, Radstock, consisting of 36 cottages, a public house and ancillary buildings for U.D.C. Documents from Miles and Wills, Council's architects, 16 Great George Street, Bristol, 1. Deposit £3 3s., cheque payable to Council. Tenders by September 2.

Salford, Lancs.—Demolition and site clearance of 27 flats at Collier Street for City

able to Council. Tenders by September 2.

Salford, Lancs.—Demolition and site clearance of 72 flats at Collier Street, for City Council. Documents from the City Engineer and Surveyor, Town Hall, Salford 3. Tenders by August 16.

Sheffield.—Complete demolition and site clearance of a factory and buildings in Granville St. (formerly occupied by Wm. Gunstones, Ltd.), for City Council. Documents from the Estates Surveyor, Town Hall, Sheffield 1. Deposit £2 2s., cheques payable to Council. Contractors who have not previously undertaken work for the Sheffield Corporation will be required to provide evidence of their capability. Tenders by August 15.

ELECTRICAL

Belfast.—Supply and erection of 33-kV. switchgear, including modifications to existing equipment, for City Council. Documents (W.198), in duplicate from the Electricity Department, East Bridge Street, Belfast, 1.Deposit £2 2s. Extra copies of the tender documents may be obtained at One Guinea each, which sum will not be returnable. Cheques payable to the Belfast Corporation Electricity Department, Tenders by September 1.

Belfast.—Complete electrical installation at proposed diagnostic centre and caretaker's residence at Greenwood House, Upper Newtownards Road, for City Council. Documents from the City Architect's Department, 40 Academy Street, Belfast, I. Tenders by September 7 (president of the control of

from the City Architect's Department, 40 Academy Street, Belfast, I. Tenders by September 7 (extension of date).

Birmingham.—Separate tenders for the electric lighting power and heating installations in a tenants room (type 2) at each of the following estates, for City Council: (Contract T50/8)—Bottetourt Road: (T50/17)—Ley Hill, Holloway. Documents from the office of Sir Herbert J. Manzoni. city engineer and surveyor, Baskerville House, Civic Centre, Birmingham I. Deposit £2 2s, each contract. Cheques payable to Sir Herbert J. Manzoni, city engineer and surveyor. Plans seen at The Mechanical and Public Lighting Department, 38 Cambridge Street, Birmingham I. Tenders by August 28.

Manchester.—Supply and installation of a passenger lift at "Heyhead View" aged persons home Wythenshawe, for City Council. Documents from City Architect, P.O. Box 488, Town Hall. Tenders by August 28.

FENCING

Hemel Hempstead, Herts. — Supply and erection of approximately 1,940yd, run of 3ft. high cleft chestnut fencing on driven stakes, for Council houses in Deaconsfield Road, Lawn Lane, Wood Crescent, Wood Lane, St. Pauls Road and Adeyfield Road, for B.C. Documents from A. H. Turner, borough engineer, High Street, Hemel Hempstead. Tenders by August 21.

Salford, Lancs. — Supply of wrought-iron fencing and gates for (a) Bolton Road Playing Fields, and (b) Clowes Park for City Council. Particulars from the Director of Parks, Buile Hill Park, Salford, 6. Tenders by Aug. 19.

GAS AND WATER SUPPLY

GAS AND WATER SUPPLY

Bath.—Supply of: (a) Submersible booster pumps with starter; and (b) reservoir level remote recording and pump control gear, for City Council. Documents from the City and Waterworks Engineer, 8a Terrace Walk, Bath. Tenders by September 1.

Belfast.—Complete plumbing installation, at proposed diagnostic centre and caretaker's residence at Greenwood House, Upper Newtownards Road, for City Council. Documents from the City Architect's Department, 40 Academy Street, Belfast, 1. Tenders by September 7.

Cork, Eire.—Following, for C.C.: (1) Bantry/Ballylickey water supply scheme—proposed extension to Droumacappal, The work consists of—The laying of approximately 1,354 lin. yd. of 3in. distribution main, together with all ancillary fittings; (2) Castletownbere sewerage scheme—proposed extension to East End. Castletownbere, The works consists of—The laying of approximately 127 lin. yd. of 9in. S.G. earthenware pipes together with all manholes and ancillary works. Documents from the County Engineer's Office, Courthouse. Skibbereen. Deposit £5 5s, for each set of documents £10 10s, if documents for both proposals are required. The recruitment of labour shall be done through the local Employment Exchange and shall be in accordance with Circular L. 3/52 issued by the Department of Local Government. Tenders by September 9.

Harrow, Middx.—Renewal of existing leadrising mains and cold water services, including stop valves and all ancillary works thereto to dwellings on the Corporation's Elmgrove estate, for B.C. Documents from Borough Ensineer, Council Offices, Cottesmore, 48 Uxbridge Road, Stanmore. Middlesex. Deposit £2, crossed cheque payable to the Harrow Corporation. Tenders by September 5.

*Lydney, Glos.—Laying water mains at Tidenham, for R.D.C. Documents from The Surveyor, Council Offices, 3 Bury Road, Ramsey. Tenders by August 21.

*Ramsey, Hunts.—Laying of approximately 110yd, of water main and fittings at The Avenue, for U.D.C. Documents from The Surveyor, Council Offices, 3 Bury Road, Ramsey

HARBOURS, PIERS AND SEA DEFENCE WORKS

Somerset.—Wick St. Lawrence Sea Wall, the site of which is situated on the coast four miles N.N.E. of Weston-super-Mare, scheme three, for the River Board: (1) Construction of access road on top of the existing sea bank 10ft. wide, 1,000ft. long; (2) construction of new toe wall 1,000ft. long of stone pitching grouted with hot filled bitumen; (3) repitching areas of the sea wall face with block stone; (4) grouting with hot filled bitumen 8,450 sq. yd. of block stone pitching on the sea face. Documents from E. L. Kelting, engineer to the Board, Somerset River Board, Divisional Engineer's Office, Stonewell Lane. Congresbury, near Bristol, Tenders by September 6.

Zetland.—Construction of a harbour in Symbister Bay, Whalsay, Shetland Isles, for C.C. The works comprise the construction of: (a) A mass concrete breakwater approximately 400ft. long; (b) a reinforced concrete pier approximately 200ft. long; (c) a steel sheet piled wharf 300ft. long, and land reclamation (20,000 cu, yd.). Contract documents and drawings seen at the offices of the County Clerk, County Buildings, Lerwick and obtained from Arch Henderson and Partners, consulting engineers, 21 Bridge Street, Aberdeen. Deposit £10 10s. Tenders by September 8.

HEATING AND VENTILATING

Ballinasloe, Galway, Eire,—Mechanical installation and the electrical installation in new dining hall, etc., at the Pines Division, Ballinasloe Mental Hospital, for the Ballinasloe Mental Hospital Board. Documents from J. A. Kenny and Partners, consulting engineers, 44 Kildare Street, Dublin. Deposit £5 Ss. Plans also seen at office of J. R. Boyd Barnett, architect, 5 Camden Place, Cork. Tenders by

Alldare Street, Dublin.

also seen at office of J. R. Boyd Barnett, architect, 5 Camden Place, Cork. Tenders by August 26.

Belfast.—Complete oil fired l.p.h.w. space heating installation, at proposed diagnostic centre and caretaker's residence at Greenwood House, Upper Newtownards Road, for City Council. Documents from the City Architect's Department, 40 Academy Street, Belfast, I. Tenders September 7 (extension of date).

Wellingborough, Northants.—Provision of hot water supply in 283 pre-war council houses, for U.D.C. Documents from J. A. Duncan, housing manager, Council Offices, Swanspool, Wellingborough. Tenders by September 4.

HOUSING SCHEMES

HOUSING SCHEMES

Bridge-Blean, Kent.—One pair of twobedroom houses, together with external
services within the curtilage of the houses
at The Avenue, Hersden, for R.D.C. Documents from the Council Offices, 41 Old
Dover Road, Canterbury. Deposit £2 2s.
(cheques, postal orders, etc., to be made
payable to the Bridge-Blean Rural District
Council). Drawings seen either at the office
of H. V. Godfrey and Messenger, architects,
63 Oxford Street, Whitstable, or at the
Council Offices. Tenders by Sept. 6.

Dalkeith, Midlothian.—All trades (except
paintwork) for 61 houses and eight garages,
Shadepark housing development, for B.C.
Applications for documents in writing to
Morham and Brotchie, quantity surveyors, 29
Hanover Street, Edinburgh, 2.

Easington, Dur.—Nineteen houses at High
Hesleden, for R.D.C. Documents from D.
Conyers Kelly, clerk of the Council, Council
Offices, Easington. Deposit £2 2s.

Essex.—Pair of woodmen's cottages, at
Thordon Park, Brentwood, for C.C. Documents from the County Land Agent and
Valuer, 69 Duke Street, Chelmsford. Tenders
by August 22.

Greenwich.—Seventy houses, 42 mews flats
over garages and covered roadway, and 64
flats in an eight-storey block, at Vanbrugh
Park, Blackheath, S.E.3, for B.C. Plans inspected and other particulars obtained at the office
of Chamberlin, Powell and Bon, architects, 1
Lamont Road Passage, Kings Road, London,
S.W.10. Selected applicants (not exceeding 10)
will be notified by post and will be supplied
with bills of quantities and other documents
required to enable them to tender. Tenderers
will be required to sign, or to refuse to sign,
a certificate declaring that they are not parties
to any scheme or arrangements with other
tenderers in respect of the amount of or the
adjustment of their tender. The full wording a certificate declaring that they are not parties to any scheme or arrangements with other tenderers in respect of the amount of or the adjustment of their tender. The full wording of the certificate may be obtained from the undersigned. Applications, which must include particulars of recent works executed by applicants to G. C. Turk, town clerk, Town Hall Greenwich, S.E.10, by first post, September 1.

Greenwich, S.E.10, by first post, September I.

Newbury, Berks.—Eight blocks of four flats, scheme 9.B.—Turnpike Road housing estate, for B.C. Documents from the Borough Surveyor, Municipal Buildings, Newbury. Tenders by August 28.

Northwich. Ches.—Following for R.D.C.: Contract 12/15, four dwellings at Rudheath, together with two dwellings at Rudheath, together with two dwellings at Chapel Lane, Allostock; 12/16, 18 bungalows at Riddings Lane, Hartford; 12/17, construction of a housing maintenance depot, off Central Road, Rudheath. Documents from the Engineer and Surveyor, Whitehall, Hartford, Northwich. Deposit £2 2s. Tenders by August 31.

Pembroke.—Eight pairs of three-bedroomed houses on sites at Military Road and Bush Camp, Pembroke Dock, for B.C. Documents from W. B. Kavanagh, borough engineer and surveyor, Municipal Offices, Bush Street, Pembroke Dock, Deposit £5 5s. Tenders by August 28.

August 28.

Plymouth.—One—33 flats at Granby Way,
Devonport, two—23 flatlets, 6 flats, and a
warden's flat at St. Mary Street, Stonehouse,

three—conversion of the ground floor and a portion of the first floor of the engineering block at the Plymouth Technical College. Applications to the City Architect, Seymour Road, Plymouth by August 12. Deposit £3 3s. each scheme.

Ruthergien, Lanarks.—Forty cottage and terrace-type houses at Fernhill, for B.C. Applications to J. C. Russell, burgh surveyor, Town Hall Buildings, Rutherglen, by August 14.

14.

Rutherglen, Lanarks.—Forty non-traditional houses, i.e. according to the offerers' own plans, subject to certain requirements of the council, at Fernhill housing scheme, for B.C. Applications for lay-out plan and further particulars to J. C. Russell, burgh surveyor, Town Hall Buildings, Rutherglen, by August 14.

14. Tickhill, Yorks.—Following for U.D.C.: (1) Thirty-two houses, being an extension of the Vine Road estate, together with the construction of the roads and sewers; (2) construction of a caravan site and ablution block; (3) construction of 20 garages. Documents from J. Haslam and Sons, architects, Ryton Chambers, Newcastle Avenue, Worksop, Notts. Deposit £5 5s., cheque payable to the Council. Tenders by September 9.

Walsall, Staffs.—Following in two separate contracts, for B.C.: Ten bed-sitting bungalows. 27 garages and one pair of buingalows, type M.I. on various sites at the Mossley estate; erection of 116 garages at the Mossley estate. Documents from M. E. Habershon, borough engineer and surveyor, Council House, Walsall. Deposit £2 2s. Tenders by August 31.

Deposit £2 2s. Tenders by August 31.

Whiston, Lancs.—Twelve bungalows and two four-bedroom houses, at Knowsley housing scheme—part 1A, for R.D.C. Documents from the Engineer and Surveyor, Council Offices. Delph Lane, Whiston, Prescot. Deposit £2 2s. Tenders by September 13.

MATERIALS AND SUPPLIES

Belfast.—Supply of gas oil during 12 months commencing October 1. 1961, for City Council. Documents from the Gas Works, Ormeau Road, Belfast, 7. Tenders by August 31.

Cheshire.—Contractors wishing to be placed on an approved list from whom tenders can be obtained for the supply of the following items should apply to John G. Kellett, director of education, County Hall. Chester, by August 31: Grass seed; selective weedkiller; agricultural land drainpipes; tennis court stop netting. The list of contractors, when prepared, will operate until June 1, 1964, and accepted tenders will apply for a six-month period.

Durham.—Following for C.C.: School of Agriculture, Houghall—laboratory and library furniture; Peterlee Dene House New Modern School—fixed furniture and benches. Application to County Architect, South Street, Durham, by Aug. 16.

School—fixed furniture and benenes. Application to County Architect, South Street, Durham, by Aug. 16.

Edinburgh.—Supply of machine and hand tools to equip the technical department of Lorne Street Technical Institute, for City Council, Documents from the Director of Education, 12 St. Giles Street, Edinburgh 1. Tenders by August 25.

Tenders by August 25.

Newcastle upon Tyne.—Refilling of rotary Newcastle upon Tyne.—Refilling of Totary brushes for mechanical road sweepers for 12 months as from Nov. 1, 1961, for City Council. Documents from the Director of Public Cleansing, Cleansing Department, Newington Road, Newcastle upon Tyne, 2. Tenders by

Sept. 6. Plymouth. Sept. 6. Plymouth.—Supply of five lathes and accessories for City Council. Documents from the Stores Officer, Municipal Offices, Athenaeum Place, Lockyer Street, Plymouth. Tenders by

Place, Lockyer Street, Plymouth. Tenders by Aug. 17.

Plymouth.—Supply of 4.050ft. rubber-lined or impregnated canvas fire hose, 2½in. internal diameter, for City Council. Documents from the Stores Officer, Municipal Offices. Athenaeum Place, Lockyer Street, Plymouth. Tenders by August 17.

Wrexham, Denbighs.—Supply to the corporation depot of 300 galvanised dustbins and covers of 2½ cu. ft. capacity, to British Standard Specification 792/47, for B.C. Documents from the Borough Engineer and Surveyor, Guildhall, Wrexham. Tenders by August 18.

MISCELLANEOUS

*Great Yarmouth, Norfolk.—Renewal of sea water pumping plant, The Jetty, for B.C Deposit £2 2s. Tenders by September 4.

PLANT AND MECHANICAL TRANSPORT

Belfast.—Supply of one trailer type air compressor, for City Council. Documents from the Gas Works, Ormeau Road, Belfast, Tenders by August 17.

Newcastle upon Tyne.—Supply to the City Cleansing Department of two mechanical loading shovels, for City Council. Documents from the Director of Public Cleansing, Cleansing Department, Newington Road, Newcastle upon Tyne, 2. Tenders by Aug. 30.

Northamptonshire.—Supply of one water tender type B on 6-ton Bedford chassis for delivery during April, 1962, for C.C. Details of the appliance specification and of the ancillary equipment to be supplied with the appliance, from the Chief Fire Officer, Fire Brigade Headquarters, 28 Headlands, Kettering, Tenders by August 31.

*Stoke-on-Trent, Staffs.—Supply of plant for City Council, Tenders by August 31.

*Wellingborough, Northants.—One 800-gallon combined gulley and cesspool emptier, complete for U.D.C. Particulars from the Engineer and Surveyor, Council Offices, Swanspool, Wellingborough, Tenders by September 5.

West Riding.—Supply of following, for C.C.: The figures in brackets after each item indicate the number of units which may be purchased. Grass mower (tractor towed type) (2): dumpers, 111 cu. ft. (2). Documents from the office of the Chief Mechanical Engineer, West Riding County Council, Highways and Bridges Department, Central Repair Deport tender documents must indicate the items of plant for which the contractor is desirous of submitting tenders. Tenders by August 17.

PLAYING FIELDS, PARKS, ETC.

PLAYING FIELDS, PARKS, ETC.

Blackpool, Lancs.—Laying out, seeding and planting of areas at Mereside estate housing (contract 24). Documents from Borough Surveyor (Arthur Hamilton), Box 17, Municipal Offices, Blackpool. Tenders by Aug. 18.

Cheshire.—An approved list of contractors is being prepared by the education committee. Any contractor possessing the necessary equipment and skilled labour for laying-out large and small areas of playing fields (including earthmoving, drainage work, and the construction of hard tennis courts, running tracks and all-weather pitches) should apply to John G. Kellett, director of education, County Hall, Chester. by August 31. The panel, when formed, will apply until June 1, 1964, and all work in connection with the development of sites will be carried out by contractors selected from that panel. Contractors, when applying, should indicate for which of the following ranges they wish to be considered: Projects up to £1,500; £1,500-£3,500; £3,500 upwards.

RIVER AND FLOOD PREVENTION WORKS

Essex.—Supply and erection of two M.S. radial gates 25ft. span by 10ft, high, and one M.S. tilting gate 20ft. span by 2ft. 6in. high, for the Chelmsford flood relief scheme for Essex River Board. Documents from the Engineer to the Board, Rivers House, New Writtle Street, Chelmsford. Deposit £5 5s. Tenders by September 20.

ROADS, BRIDGES AND SITE WORKS

Aberdeenshire. — Application of thermo-plastic white lines on highways in the County, for C.C. Documents from the County Sur-veyor, 4 Albyn Place, Aberdeen, Tenders by August 15.

veyor, 4 Albyn Place, Aberdeen, Tenders by August 15.

Aldeburgh, Suffolk.—Making up of the following, for B.C.: Linden Road—772yd, long 16ft. carriageway (5ft. footways and 7ft. verges); Linden Close—715yd, long 16ft. carriageway (5ft. footways and 2ft. verges); Fairfield Road (part of)—76yd, long 16ft. carriageway (5ft. footways and 5ft. verges); Springfield Road—219yd, long 16ft. carriageway (5ft. footways and 2ft. verges). The works include construction of carriageway (fine cold asphalt and tarmacadam on hardcore), drainage, kerbing, and construction of footway with grass verges. Documents from the Borough Surveyor, Borough Offices, Aldeburgh, Suffolk.—Construction of

with grass verges. Documents from the Borough Surveyor, Borough Offices, Aldeburgh. Deposit £2 2s. Tenders by September 4.

Aldeburgh, Suffolk. — Construction of 478 sq. vd. of fine cold asphalt and tarmacadam carriageway on hardcore, footways, and ancillary works on the Franklin Road housing estate, for B.C. Documents from Borough Surveyor, Borough Offices, Aldeburgh. Deposit £2 2s, Tenders by September 4.

Antrim.—Resurfacing in asphalt, including kerbing and other auxiliary works, bortions of the following roads, for C.C.: (Proposal 7, Contract 2A)—Belfast-Antrim Road, Route T.7, at Muckamore, approximate area 5,840 sq. vd.; (112, 2B)—Finaghy Road North, Route C.2, at Finaghy railway bridge, approximate area 2,310 sq. vd.; (23, 2C)—Belfast Larne Road, Route A.2, between Magheramorne and Larne, approximate area 14,400 sq. vd. Documents from the County Surveyor's Office, County Courthouse, Crumlin Road, Belfast, Deposit £2 2s., each individual contract. Tenders by August 18.

*Bedfordshire.—Improvement of trunk road A.6, from Luton Borough boundary to Warden

*Bedfordshire.—Improvement of trunk road A.6, from Luton Borough boundary to Warden Hill, for C.C. Deposit £2. Tenders by August 18.

Cheadle Square Gatley, Ches.—Laying of bituminous macadam

and

con-acks ohn Hall.

llow-Pro-up-

M.S. l one high, e for En-rittle ers by

RKS ermo Sur-

f the l. long l 7ft. t. car-erges); t. car-erges); rriage-

rriage

works e cold drain-otways n the

on of farmac-ys, and nousing gh Sur-Deposit

cluding tions of losal 7. Route a 5,840

Route a 5,840 North, approxi-Belfast laghera-14,400

ing (

surfacing at Brookfield, Wilmslow Road, Cheadle, for U.D.C. Documents from the Engineer and Surveyor, Town Hall, Cheadle. Tenders by August 26.

Coulsdon and Purley, Surrey. — Private street improvement works, for U.D.C.; (a) Elton Road, Purley; (b) Elmfield Way (part of), Sanderstead; (c) footpath (part of), Westfield Avenue to Mitchley Avenue, Sanderstead, Documents from H. M. Collins, engineer and surveyor, Council Offices, Purley. Deposit £3 3s, each tender. Tenders by August 31.

gineer and surveyor, Council Offices, Purley, Deposit £3 3s, each tender. Tenders by August 31.

Coventry.—Widening and reconstruction of Ansty Road, between the junction with Clifford Bridge Road and Woodway Lane, for City Council. The work includes approximately 5,000 sq. yd. lean-mix concrete base, 7,500 sq. yd. bituminous surfacing, 360 lin, yd. of S.W. swer up to 30in, diameter, demolition of existing bridge over River Sowe with reconstruction using steel beams and reinforced concrete (skew span 42ft.), kerbing, footways, and all ancillary work, Documents from the City Engineer, Council House, Coventry, Deposit £5. Tenders by August 28.

*Dudley, Worcs.—Roads and sewers, Russells Hall estate private development, for B.C. Applications by August 16. Deposit £2 2s.

East Suffolk.—Heating and planing, and surfacing with \$in\$, bituminous carpet, 10,000 sq. yd. of Garrison Lane, Felixstowe, in mid-September, contract 46, for C.C. Documents from County Surveyor, County Hall, Ipswich.—Roadworks, at the Redbraes

Ipswich. Edinburgh. — Roadworks at the Redbraes housing area, for City Council, comprising the surfacing of approximately 1,070 sq. yd. of carriageway in bitumen macadam and asphalt and the construction of 270 sq. yd. of footway including 288 lin. yd. of punched whin kerb. Documents from the City Engineer's Department. 329 High Street. Tenders by August 28.

partment. 329 High Street. Tenders by August 28.

Farnham, Surrey.—Improvement works as follows, for U.D.C.: (1) Weybourne Road (B.3007)—construction of concrete bus bay; (2) Upper Weybourne Lane (CX.121)—the works comprise the widening of the existing carriageway to 22ft, and the construction of footpaths, the approximately quantities being: (a) 2,000 cu. yd. excavation; (b) 2,500 super. yd. carriageway construction; (c) 1,800 super. yd. carriageway construction; (d) 900 lin. yd. concrete kerb and sett channels; (e) ancillary works. Documents from Geoffrey Poole, engineer and surveyor, Council Offices, South Street, Farnham. Deposit £2 2s. each site. Tenders by August 21.

*Gosport, Hants.—Highway improvement

"Gosport, Hants. — Highway improvement works in Rowner Lane, Wych Lane and Brewers Lane, for B.C. Deposit £2 2s. Tenders by August 28.

works in Rowner Lane, Wych Lane and Brewers Lane, for B.C. Deposit £2 2s. Tenders by August 28.

Hampshire.—Trunk road, A.3, improvement at junction Bolinge Hill Road, Petersfield, for C.C., comprising therealignment and reconstruction of approximately 1,250yd, of carriageway between Weston railway bridge and The Causeway. The works include approximately 20,000 cu. yd. of excavation (parly in rock), filling, surface water drainage, road foundations in gravel, lean-mix concrete (or dry stone), bituminous macadam, together with channelling, and all other incidental works. Applications to H. N., lenner, county surveyor, The Castle, Winchester, by noon, Aug. 15.

Hampshire.—Widening trunk road, A.33—Otterbourne Hill. Winchester, from Kiln Lane to the Cricketers' Arms, approximately 670 vd. to provide a 30ft, carriageway, for C.C. The works include excavation, filling, surface water drainage, carriageway construction in gravel, lean concrete (or dry stone) and bitumen macadam, kerbing, and ancillary works. Applications to H. N. Jenner, county surveyor, The Castle, Winchester, by noon, August 24.

Heanor, Derbys.—Widening and improving furnace Lane, Loscoe, length 104yd,, for U.D.C. Documents from J. H. Garside, engineer and surveyor, Council Offices, Ilkeston Road, Heanor. Deposit £3 3s. Tenders by August 25.

Hinckley, Leics.—Trunk road A.47—Shilton

August 25.

Hinckley, Leics.—Trunk road A.47—Shilton
Hill diversion, for U.D.C., comprising the
construction of a 60ft. wide road 800yd. long
and drainage and ancillary works. Documents
from the Surveyor, Argent House, St. Mary's
Road, Hinckley. Deposit £2. Tenders by
September 2.

koad, Hinckley. Deposit £2. Tenders by September 7.

Hitchin, Herts.—Reconstruction of approximately 400 lin. yd. of 24ft, wide carriageway at Old Hale Way, for U.D.C. The works include site clearance, excavation, filling, surface water drainage, reconstruction and resurfacing of the carriageway with hardcore, clinker and bitumen macadam, kerbing and channeling and the construction of footpaths and verges. Documents from Robert F. Earley and Partners, consulting engineers, 39 Victoria Street, London, S.W.1. Deposit £3 3s. Tenders by August 28.

Ilford, Essex.—Reconstruction of Cranbrook Road (part). Northbrook Road to Redcliffe Gardens, for B.C., comprising the reconstruction of approximately 5,200 sq. yd. of existing carriageway with 10in. reinforced concrete on a 6in. hardcore sub-base, the taking up and re-laying of approximately 1,000 lin. yd. of granite kerbing and approximately 2,800 sq. yd. of paving, together with ancillary works. Documents from the Borough Engineer, Town Hall, Ilford. Deposit £2 2s. Tenders by Aug. 22.

Ilford, Essex.—Resurfacing of footpaths, comprising approximately 4,300 sq. yd. of cold asphalt, together with incidental works, in parks, for B.C. Application in writing to the Borough Engineer and Surveyor, Town Hall, Ilford. Deposit £2 2s. Tenders by Aug. 22.

Inverness-shire.—Regrading of Kingussie

Name of the control o

veyor, County Buildings, Inverness. Tenders by Aug. 18.

Lancashire.—Aerial survey of the Lancashire-Yorkshire motorway, length approximately 18.16 miles, for C.C. Documents from the County Surveyor, P.O. Box 9, Preston. Tenders by August 17.

Leicester.—Narborough Road improvement for City Council, comprising works to extend the dual carriageway for approximately 200yd. by the construction of a 24ft. carriageway alongside the existing. Works include the following: (1) 1,000 sq. yd. of 9in. concrete with 3in. hot rolled asphalt surfacing; (2) 300 sq. yd. of wetmix, lft. thick, with 3in. dense tar surfacing; (3) footway, central reservation and drainage works. Documents from John L. Beckett, city surveyor, Town Hall, Leicester. Deposit £1 ls. Tenders by Aug. 21.

Leyton, Essex.—Construction of a bus layby in High Road for B.C., including the provision of a concrete bus lay-by and mass concrete retaining wall, with ancillary works. Documents from the Borough Engineer, Town Hall, Leyton. Deposit £2 2s. Tenders by Aug. 28.

Newbury, Berks.—Kerbing and footpaths at

Aug. 28.

Newbury, Berks.—Kerbing and footpaths at Bath Road housing site, part 4, for B.C., comprising approximately 1,200 lin. yd. of kerbing and 2,500 sq. yd. of asphalt footpath with precast concrete edging, verges and ancillary works. Documents from the Borough Surveyor, Municipal Buildings, Newbury.

paul wifft precast concrete edging, verges and ancillary works. Documents from the Borough Surveyor, Municipal Buildings, Newbury.

Portadown, Armagh.—Laying of 4,850 sq. yd. two course hot rolled asphalt, for B.C. Documents from the Borough Engineer. Tavanagh House, Portadown. Deposit £2 2s. Tenders by September 2.

*Slough, Bucks.—Construction of trading estate link road, for B.C. Deposit £2 2s. Tenders by August 30.

Sunderland, Dur. — Road and footpath works at (a) Hylton Road; (b) Queen Alexandra Road; and (c) Ewesley Road and Cleveland Road, for B.C. Comprising—(a) approximately 4,365 sq. yd. carriageway works; (b) approximately 4,365 sq. yd. carriageway works; (c) approximately 600 lin. yd. kerbing works and 2,600 super. yd. flagging works. Documents from the Borough Engineer, 27 Fawcett Street, Sunderland. Deposit £2 2s., cheques payable to Sunderland Corporation. Tenders by Aug. 24.

Surbiton, Surrey.—Resurfacing of part of Kingston Road with hot rolled asphalt for B.C. Documents from R. Thirlway, borough engineer and surveyor, Council Offices, Ewell Road, Surbiton. Tenders by Aug. 21.

Surrey. — Making-up Wharf Lane, Send, near Guildford, with tarmacadam surfacing to carriageway and footways, kerbing, etc., approximate length 300yd. for C.C. Documents from the office of the County Engineer, County Hall, Kingston-upon-Thames. Tenders by Aug. 26.

Wanstead and Woodford, Essex.— Construct approximately 400 sq. yd. of tarmacadam hardstanding on hardcore or lean-mix concrete base, 260 sq. yd. of 6in, reinforced concrete garage bases, drainage and appurtenant works at Old Mill Court for B.C. Documents from the Borough Engineer.

Municipal Offices, Woodford, E.18. Deposit £2. Tenders by Aug. 24.

"Warwickshire.— (One) Weddington Lane improvement, (2) road works, North Road and (3) widening carriageway Fosse Way for C.C. Deposit £1 is., for each. Tenders by August 21.

West Riding.—Construction and making-up of a total length of 56yd. of the private street

West Riding.—Construction and making-up a total length of 56yd, of the private street

fronting Taskers Cottages in the parish of South Kirkby in the Rural District of Hemsworth, for C.C. Documents from the County Engineer and Surveyor, County Hall. Wakefield. Deposit £1. Cheques, etc., crossed and payable to the West Riding Treasurer. Tenders by August 21.

by August 21.

Whitworth, Lancs.—Making up of Lloyd Street, for U.D.C. The work includes altering levels of approximately 200 yd. of carriageway and footways, tarmacadam surfacing and concrete flagging. Documents from the Council's Surveyor, Council Offices, Whitworth. Tenders by August 28.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

DISPOSAL

Brierley Hill, Staffs,—Foul water sewer duplication, Dawley Brook, and extension of 15in. diameter cast-iron siphon, Moor Street, for U.D.C., comprising 430 lin. yd. of 15in. diameter stoneware pipes laid in a private estate road, and 72yd. 15in. cast-iron piping laid in a public highway, together with precast concrete manholes, and other ancillary works. Documents from R. H. J. Comber, engineer and surveyor, Civic Buildings, Brierley Hill. Deposit £3 3s. Tenders by Aug. 31.

Bromsgrave. Wares—Construction of Street Staffs.

Brierley Hill. Deposit £3 3s. Tenders by Aug. 31.

Bromsgrove, Worcs.—Construction of surface water sewer Alvechurch Lane, Burcot, for U.D.C. The approximate quantities are as follows: 200 lin. yd. 9in. diameter storm water sewer. Documents from the Engineer and Surveyor, Council House, Bromsgrove. Deposit £2 2s. Tenders by August 25.

Bury, Lanes.—Extensions to Blackford bridge sewage works, for B.C., comprising reinforced concrete detritus tanks, screen chambers, storm water tanks, storm water overflows and channels, pumping stations, rising mains, mechanical plant, sewerage, access roads, and ancillary works. Documents from Borough Engineer Town Hall, Bury. Deposit £5 5s. Tenders by September 2.

"Droitwich, Worcs.—Sewerage and sewage disposal, contract 1, for B.C. Deposit £5 5s. Tenders by September 8.

Littlehorough, Lanes.—Construction of approximately 93 lin. yd. of 9in. diameter earthenware sewer, and one brick chamber for U.D.C. Documents from D. W. Allison, engineer and surveyor, Council Offices, Littleborough. Tenders by Sept. 4.

Lofus, Yorks.—Construction of approximately 1,350 lin, yd. of 6in, foul water sewer.

engineer and surveyor, Council Offices, Littleborough. Tenders by Sept. 4.

Loftus, Yorks.—Construction of approximately 1,350 lin. yd. of 6in. foul water sewer, Easington, for U.D.C. Documents from T. C. Ellison, clerk of the Council, The Council House, Loftus, Saltburn. Deposit £2 2s. Tenders by Sept. 7.

Newry, Down.—Sewerage scheme, contract 1, for U.D.C., comprising the construction of (a) sewage treatment works for the town, comprising inlet works, sedimentation tanks, sludge digestion tanks, works pumphouse and administrative buildings, sludge drying beds, river outfalls, together with piling and ancillary works; (b) approximately 920 lin. yd. 18in. diameter, 295 lin. yd. 4in. diameter, 790 lin. yd. 3in. diameter spunnon main; (c) sewage and stormwater pumping station and approximately 410 lin. yd. low level 21in. diameter pipe crossing under Newry Canal ty thrust boring, and a 21in. diameter pipe crossing under Newry River. Documents from Munce and Kennedy, consulting engineers, 133 University Street, Belfast, 7 Deposit £5 5s., cheque only, payable to the Council. Plans also seen at the Council Offices, Town Hall, Newry. Tenders by Sept. 11.

New Windsor, Berks.—Clewer/Dedworth

Deposit £5 5s., cheque only, payable to the Council. Plans also seen at the Council Offices, Town Hall, Newry. Tenders by Sept. 11.

New Windsor, Berks.—Clewer/Dedworth surface water sewer for B.C., comprising the construction of approximately 692 lin. yd. of 24in. and 27in. diameter sulphate resisting spun-concrete pipe sewers, and incidental works. Documents from the Borough Engineer, Kipling Memorial Buildings, Alma Road, Windsor. Tenders by Aug. 25.

Richmond, Yorks.—Following for the Moulton sewerage scheme for R.D.C.; (Contract 1) Construction of approximately 1,110yd. of 6in. earthenware sewer, an ejector station, and approximately 175yd. of 4in. spun-iron pumping mains; a disposal works, comprising balancing and sedimentation tank, percolating filter, humus tanks and sludge drying beds; (2) supply and erection of a duplicate set of 18 g.o.m. compressed air ejectors. Documents from the Engineer and Surveyor, Swale House, Richmond. Deposit £2. Tenders by Sept. 4.

"Scarborough, Yorks.— Southern outfall sewer reconstruction, stage 2, for B.C. Deposit £2 2s. Tenders by September 1.

"Stafford.—Cambridge Street relief surface water sewer, for B.C. Tenders by August 31.

"Swale, Kent.—Improvement to Teynham S.D. Works, for R.D.C. Deposit £5 5s. Tenders by September 14.

*Warwick. — Culverting and regrading Wathen Road watercourse, for B.C. Deposit £2 2s. Tenders by August 30.
*Wrexham, Denbighs.—(One) Borras Park Road surface water sewer and (2) Kingsmills Road improvement, for B.C. Deposit £2 2s., each contract. Tenders by August 21.

STREET LIGHTING

Dunbartonshire.—Erection and wiring only of 41 bulkhead fluorescent footpath lighting points in the following 10 underpasses within Cumbernauld New Town special lighting district, for C.C.: Ring Road (north side)—5; Carbrain Road—4; Kildrum one to three—1. The lanterns necessary for the contracts will be supplied by the County Council. Applications to William Arthur, county lighting superintendent, 24 George Square, Glasgow, C.2, by August 14.

AWARDS

BUILDING AND DECORATING (See also Housing Schemes)

(See also Housing Schemes)

Aberdeen.—Erection of new out-patients' department at Royal Aberdeen Hospital for Sick Children for the North Eastern Regional Hospital Board—A. Hall and Son (Builders), Ltd., Granitehill Road, Northfield, Aberdeen. Charles C. Wright, regional architects F. A. McDonald and Partners, consulting engineers, 3 Golden Square, Aberdeen, and McLeod and Aitken, I Huntly Street, Aberdeen, surveyors.

Aberystwyth, Cards.—Erection of halls of residence at University College of Wales—Gec, Walker and Slater, Ltd., Coychurch Road, Bridgend, £437,239. Work about to

commence.

Bishop Auckland, Dur. — Following for C.C.:

Francions to Tow Law County School ishop Auckland, Dur. — Following for C.C.:
Extensions to Tow Law County School—
H. Ayton and Sons, Ltd., 5 George Street,
Blackhill. Consett, £11,484; renewal of
floors at Barrington C.E. (Controlled)
Modern School—E, and A. Nelson
Laburnum Avenue, Durham, £946 (recommended)

Modern School—E. and A. Neison Laburnum Avenue, Durham, £946 (recommended).

Brentford and Chiswick, Middx.—Following for B.C.: Erection of 20 garages at Syon estate—S. T. Mace, Ltd., 142a Bath Road, Hounslow, £4,210 (recommended, subject to Ministry approval); R. Ashworth and Son, £7,523, and Tofem, Ltd., £6,180.

External and internal redecoration of new wing at Chiswick rammar Girls' School—J. Cole (Painting), Ltd., Cheapside, London, E.C.2, £2,160 (recommended).

Bridgnorth, Salop.—Exterior redecoration of 55 houses at Grove estate (group a) and 51 houses at Woodberry Close, Sydney Cottage estate (group b) for B.C.—Heath-cock and Walsh, Wordsley, Stourbridge, £9 12s, and £9 17s, per house, respectively (recommended); J. Lambie, £12 15s. each; C. Perry, £13 and £14 each, respectively; B. D. Hodgkiss, £13 8s. each; A. Miles and Son, £17 10s. and £19 each, respectively (recommended).

Button Latimer, Northants.—Exterior nainting

and Son, £17 10s. and £19 cach, respectively (recommended).

Burton Latimer, Northants.—Exterior painting of 40 houses at the old Station Road estate for U.D.C.—Green and Litchfield, Kettering, Northants., £531 (accepted); Robinson and Buckland, £550; A. S. Burbidge, £595; Clipstone and Weed, £709; R. Fox and Son, £720; Flookes, £834; D. A. Hill, £854. Work about to commence.

Chislehurst and Sidcup, Kent.—Erection of public conveniences at St. John's Road for U.D.C. W. B. Farrow, engineer and surveyor—Baker and Davies, Ltd., 2a Sidcup Hill, Sidcup, £8,293. Work to commence Aug. 21.

Aug. 21.

Consett, Dur.—Alterations at the magistrates' court for C.C.—R. C. Williamson (Durham), Ltd., Rowlands Gill, £3,566.

Court for C.C. — R. Williamson (Durham), Ltd., Rowlands Gill, £3,566.

Croydon, Surrey.—Extensions and adaptations to Portland Secondary School at Sandown Road, for B.C.—Skinner and Partners, Ltd., 307 London Road, Croydon, £72,367 (accepted); Chas. Sayers and Son, Ltd., £81,932; T. R. Roberts (Builders), £84,215; R. D. Hope and Co., Ltd., £87,560; Ives and Co. (Contractors), Ltd., £86,380.

Dagenham, Essex.—Structural steelwork for new transport workshops for B.C.—Quayside Engineering Co., Ltd., £2,775 (recommended).

Doncaster, Yorks.—Extensions to the Dinnington Secondary School for the West Riding Co. E.C. Basil Spence and Partners, architects, 40 Moray Place, Edinburgh, 3—The Wade Construction Co., Ltd., High Street, Wath-on-Dearne, Yorkshire, £351,616. Work commenced.

commenced.

Dublin, Eire. — Rebuilding of Liberty Hall at
Beresford Place/Eden Quay for The Irish

Transport and General Workers' Union—John Sisk and Son (Dublin), Ltd., Wilton Works, Pembroke Row, Baggot Street, Dublin, 2, £461,860. Richard J. Bigger, quantity surveyor, 4 Upper Fitzwilliam Street, Dublin; Desmond Rea O'Kelly, architect, 15 Fitzwilliam Square, Dublin, and Varming and Mulcahy, 4 Northbrook Road, Leeson Park, Dublin, 2, are the consulting mechanical and electrical engineers. Work to commence Oct. 2.

Road, Leeson Park, Dublin, 2, are the consulting mechanical and electrical engineers. Work to commence Oct. 2.

Durham.— Renewal of floors at Browney County School for C.C.—E. and A. Nelson, Laburnum Avenue, Durham, £2,127 (recommended).

Eastbourne, Sussex.— Erection of three garages and provision of hard standing at Langney Village for B.C.—Mark Hookham. Ltd., Springfield Road, Eastbourne, £874 (recommended); A. J. Bessant, Ltd., £1,025; Carn and Sons (Eastbourne), Ltd., £1,120. G. Gower and Son, Ltd., £1,150.

Edmonton, Middx.—Provision of steel reinforcement for block K at Claverings Industrial estate for B.C.—Reinforced Concrete Steel Co., Ltd., 54 Victoria Street, London, S.W.I, £2,408 (recommended).

Ellesmere Port, Ches.—Construction of a new factory at Hooton Park for Vauxhall Motors, Ltd.—Sir Alfred McAlpine and Son, Ltd., Hooton, Little Sutton, Wirrat. Howard Fairbairn and Partners, architects. 81 Piccadilly, London, W.I; G. D. Walford and Partners, quantity surveyors, 7 St. James's Street, London, S.W.I, and G. A. Dodd and Partners, consulting engineers 17 Railway Approach, London, S.E.I.

Felling, Dur.—Erection of swimming baths on the Leam Lane housing estate for U.D.C.—Harbour and General Works, Ltd., Springwell Road, Washington, Co. Durham, Estimated cost £234,987. J. H. Napper and Partners, architects, 133 Osborne Road, Newcastle upon Tyne; R. W. Gregory and Partners, consulting engineers, Pilgrim House, Pilgrim Street, Newcastle; F. A. MacDonald and Partners, structural engineers, 11 Woodside Terrace, Glasgow.

Heston and Isleworth, Middx.—Replacement of wire mesh guards to rear balconies and external staticases of 74 upper flats at the Worton estate 2 for RC—Allen and

Heston and Isleworth, Middx.—Replacement of wire mesh guards to rear balconies and external staircases of 74 upper flats at the Worton estate 2 for B.C.—Allen and Greaves, Ltd., Angel Road Works, Angel Road, London, N.18 (recommended). Estimated cost £1,500.

Honiton, Devon.—Provision of lavatory accommodation at the swimming pool for B.C.—Direct Labour (recommended).

Islington.—Reconstruction of a major part of the Hornsey Road Baths for B.C.—G. E. Wallis and Sons, Ltd., 231 Strand, London, W.C.2, £434,700 (recommended, fixed-price tender).

tender)

W.C.2, £434,700 (recommended, fixed-price tender).

Jarrow, Dur.—Erection of new register office for C.C.—M. S. Failes, Ltd., 199 Coatsworth Road, Gateshead, 8, £7,785 (recommended); W. Hall (Contractors), Ltd., £9,959; G. A. Yellowey, £9,445; David Glen, Ltd., £8,982; W. Wigham and Son (Builders), Ltd., £8,535; O. P. Docherty and Son, £7,921.

Kingsclere and Whitchurch, Salop.—Modernisation and repair of (1) 27 pre-war houses at Overton and (2) 23 pre-war houses at Whitchurch, for R.D.C. Henshaw and Cheek, architects, I West Street, Andover—(1) N. G. Piper, Ltd., Andover, Hants., £16,109 (accepted); Eades Bros., Ltd., £17,362; Birkett and Co. (Salisbury), Ltd., £20,922; (2) Eades Bros., Ltd., Andover, Hants., £13,375 (accepted); N. G. Piper, Ltd., £115,745.

Leamington Spa, War.—Following for B. C.: External rendering to 42 houses (contract 1) and 40 houses (2) at Strubland estate—I. H. Woodward, Ltd., Leamington Spa, £5,182 (recommended in lieu of previous tender).

Spa, £5,182 (recommended in lieu of previous tender).

External painting during 1961: (contract 17) eight shops and eight flats at Whitnash and (18) 22 houses at The Approach—E. H. Burgess, Ltd., 61 Warwick Street, Leamington Spa, £448 and £440, respectively; (19) 16 shops and four flats and nine maisonnettes at Crown Way—J. H. Woodward, Ltd., Leamington Spa., £946 (recommended). Woodward, Ltd (recommended).

(recommended).

Lincoln.—Erection of a block of shops in Lincoln—Ellis Thompson and Co., Ltd., I James Street, Louth. Estimated cost £38.000. H. A. Halpern and Partners, architects, and J. Playle, quantity surveyor, both of 58-60 Cannon Street, London, E.C.4. both E.C.4.

E.C.4.

Luton, Beds. — Following for B.C.: Luton
High School, construction of a staircase—
J. T. Garrett and Sons, Ltd., Luton,
£1,918; supply and laying 5/32in. rubber
tiled flooring in the science block—
Rubbalux Co., 25 St. Barnabus Street,
London, S.W.1, £1,615 (recommended).

Interior painting of Hitchin Road Girls and Dunstable Road Junior Schools—S. Greenwood, Luton, £1,235 and £525, respectively (recommended).

S. Greenwood, Luton, £1,235 and £525, respectively (recommended).

Manchester. — Following for City Council: Alterations to form school meals kitchen at St. Lawrence's R.C. School—G. W. Dawson and Co. (Builders), Ltd., Manchester; improvements to dining room at Margaret Barclay Special School—Tomkin and Ryder, Ltd., Manchester; erection of hostel at Didsbury Training College—G. and J. Seddon, Ltd., Walkden, Manchester, erection of street pavior's workshop at College of Building—Robert Carlyle and Co., Ltd., Manchester; foundations and finishing works for three movable classrooms at \$\$. Pius X R.C. Secondary School—Massey and Harris, Cook Street, Stockport; alterations and extensions at Grange Street Primary School—Bakewell (Builders), Ltd., II Thomas Street, Manchester, 14; erection of extensions to dining room and alterations to kitchen at Poundswick Grammar School—Direct Labour; cleaning and painting of bridges—Catons (Painters), Ltd., Sale, and G. B. Wynne, Manchester; repairs and maintenance work to the former Fairey Aviation hangar 6 at Manchester Airport—Direct Labour; work in connection with reorganisation of the Didsbury library—W. Fearnley and Sons (Salford), Ltd., Eceles New Road, Manchester, 5 (all recommended),

Middlesbrough, Yorks.—Provision and erce-

organisation of the Vision of the W. Fearnley and Sons (Salford), Ltd., Eccles New Road, Manchester, 5 (all recommended), Middlesbrough, Yorks.—Provision and erection of the superstructure for a span roofed greenhouse, plant frame, and lean-to-corridor forming part of the scheme at Albert Park.—W. Richardson and Co., Ltd., Darlington, £2,029 (recommended), painting Tees (Newport) Bridge—Thomas Cotton, Ltd., 153 Alber Road, Middlesbrough, £1,609 (recommended, in lieu of previous tender).

Newcastle upon Tyne.—Erection of a 15-storey office block overlooking St. James's Park Football Ground for Welbar Developments, Ltd.—Holland & Hannen and Cubitts (Scotland), Ltd., 5 Royal Terrace, Edinburgh, £300,000.

Northern Ireland.—Construction and com-

Ltd.—Holland & Hannen and Cubitis (Scorland), Ltd., 5 Royal Terrace, Edinburgh, £300.000.

Northern Ireland.—Construction and completion of a factory extension at Lisnaskea for English Sewing Cotton, Ltd., for Ministry of Commerce, R. Ferguson and S. McIlveen, architects. 15 College Gardens, Belfast—P. Clarke and Sons, Ltd., Slushill Quarries, Lisnaskea,
North Shields, Northumb.—Construction of two-storey brick structure, designed to take a third storey, having precast concrete first floor and flat roof, adjacent to the Tyne Commission Quay at Albert Edward Dock, for Tyne Improvement Commission—T. H. Rigby, 12 Grand Parade, Tynemouth. Work commencing Aug. 15.
Oxford.—Final contract for superstructure in connection with the erection of St. Catherine's College, Holywell, Great Meadow, for the University of Oxford—Marshall Andrew and Co., Ltd., 40 Broadway, London, S.W.I. Estimated cost £lm. Prof. Arne Jacobsen, architect, in collaboration with P. Dowson, Pembroke Studios, Pembroke Gardens, London, W.8, consulting engineers, Ove Arup and Partners, 13 Fitzroy Street, London. W.1, and quantity surveyors. Northeroft, Neighbour and Nicholson, Victoria House. Southampton Row, London, W.C.1. Work will start within the next two months.
Oxford.—Phase II of the Cowley shopping centre precinct for City Council—John Laing and Son, Ltd., Mill Hill, London, N.W.7, £198,941 (recommended, negotiated tender, subject to Ministry approval).

tender, subject to Ministry approval).

Salford, Lancs.—Supply and skilled erection of extensions to the tailings hoppers at the Wallness Cleansing Depot, and supply, etc., of a dust extraction plant to service the tailings hoppers, and incidental building work, for City Council—Heenan and Froude. Ltd., Worcester, £6,463 (recommended).

Sheffield—Exection of a factory in Harleston.

mended).

Sheffield.—Erection of a factory in Harleston
Street for Moorwood-Vulcan, Ltd. Plans
by Husband and Co., Glossop Road, Sheffield.—W. G. Robson, Ltd., Bamforth Street,
Sheffield, 6, £250,000. Work commencing
Aug. 14.

Extensions to the Edlington Victoria
Primary School for the West Biding Co.

Aug. 14.

Extensions to the Edlington Victoria Primary School for the West Riding Co. E.C. Foster-Smith, Wallis and Anderton, architects, Princes Chambers, 37 Hall Gate, Doncaster—John Dixon (Doncaster), Ltd., Greenfield Lane, Balby, Doncaster, £53,984. Work commenced.

Sherburn, Dur.—Renewal of floors at County School for C.C.—E. and A. Nelson, Laburnum Avenue, Durham, £1,916 (recommended).

mended).

Shrewsbury, Salop.—Erection of prefabricated superstructure in connection with extension to isolation block and adaptations to wards I and 3 for paediatric purposes at Copthorne

11

Girls'

ols— £525.

ncil:

en at vder

t St.

lla n of tions thool

nainirect

erec.

span an-to

ded); omas dles-u of

orey Park

ents. irgh, com

and lens, ishill

take first

uth.

dow

way Prof

and pton

ction

ding and com-

eston Plans Shef-creet, acing

toria Co. rton,

Gate, Ltd., ,984.

at

sion

n

Hospital, for the Birmingham Regional Hospital Board—Vic Hallam, Ltd., Valley Works, Langley Mill, Nottingham, £2,042 (recommended).

Hospital Board—Vic Hallam, Ltd., Valley Works, Langley Mill, Nottingham, £2,042 (recommended).

Southend-on-Sea, Essex.—Following for B.C.: Erection of a staff room at West Leigh Junior Mixed School—Howes and Saville, Chelmsford, £1,065; alterations to diningroom and kitchen at Crownstone House—Direct Labour (recommended).

Southgate, Middx.—Exterior redecoration of dwellings in Ashridge Court, and houses, Masefield Crescent and Trent Gardens, for B.C.—Haymills, Ltd., Empire House, Hanger Green, London, W.S. £846 and £1,232, respectively, and Perrott Grenville and Co., Ltd., 58 Kensal Road, Paddington, London, W.Jo, £1,313 (recommended).

Stanley, Dur.—Renewal of floors at Oxhill County School for C.C.—E. and A. Nelson, Laburnum Avenue, Durham, £1,873 (recommended).

Stoke-on-Trent, Staffs.—Investigations in connection with provision of maternity unit and nursing staff accommodation at City General Hospital Board—Northern Strip Mining, Ltd., Knowle House, Norfolk Park Road, Sheffield, 2, £4,668 (recommended).

Stone, Staffs.—Erection of public convenience at Barlaston for R.D.C. W. Hawkes, engineer and surveyor—V. S. Keeling, Fairhaven, Cheadle Road, Blythe Bridge. Stoke-on-Trent, £690 (accepted); Bowers and Sims, Ltd., £758; Boulton and Evans, £851. Work about to commence.

Sunderland, Dur.—Conversion of central kitchen to classrooms, cloakrooms and canteen/scullery for use by New Silksworth County School for C.C.—H. Hewitt and Sons, Ltd., \$5tation Works, Haswell, £4,350 (recommended).

Sons, Ltd., Station Works, Haswell, £4,350 (recommended).

Sutton Coldfield, War. — Provision of bulk stores and mortuary at Good Hope Hospital Board—Thomas Lowe and Sons, Ltd., Curzon Street, Burton-on-Trent, £50,784 (recommended).

Tipton, Staffs.—Erection of a single-storey block of dressing-rooms (with showers, etc) at Jubilee Park and a workmen's messroom and a potting room at the cemetery for B.C.—Perks and McRobie, Ltd., 31 Castlecroft Lane, Wolverhampton, £6,114 and £2,391, respectively (recommended, subject to Ministry approval).

Typemouth.—Erection of public convenience

Tynemouth.—Erection of public convenience at Hudson Street, North Shields for B.C.—T. H. Rigby, 12 Grand Parade, Tynemouth,

E547.

Walsall, Staffs.—Provision of sanitary annexes and boilerhouse for standby package boiler at Manor Hospital for the Birmingham Regional Hospital Board — A. and R. Astbury, Watling Street, Cannock, £10.675, and H. Tomlinson and Son, Birchills Road, Walsall, £3.290, respectively (recommended).

waisall. respectively (recommended).

Walthamstow, Essex. — Following for B.C.:
Conversion of the existing garage, the erection of a new paper-baling shed and the construction of the new road and drainage for new denot at Low Hall Farm. stage I—Direct Labour, £97,950; renewal of assembly hall floor at Henry Maynard Girls' School—Kittridge Flooring, Ltd., Romford, £779 (recommended).

Widnes. Lanes.—Work of strengthening of existing floors at St. Marie's R.C. Primary School (Girls') by the insertion of steel channels alongside the existing wooden beams for B.C.—Direct Labour. Work commenced

beams for B.C.—Direct Labour.
commenced
Willesden, Middx.—Following for B.C.: Internal decoration and repairs at the
Convent of Jesus and Mary — E. and M.
Builders, Ltd., 7 South Drive, Ruislin,
£2.488.
Roofing repairs at the Kingsley works—
Industrial Engineering, Ltd., Vogue House,
Hanover Square, London, W.1, £2,527
(recommended).

CLOTHING AND TEXTILES

Southgate, Middx.—Supply of following for B.C.: 40 donkey jackets — Wallach Bros., Ltd., 49 Tabernacle Street, London, E.C.2, £3 9s. 5d. each: 40 pairs of rubber boots—Normier Tyre Co. (Rubberine), Ltd., 139 York Way, London, N.7, £1 7s. per pair. 14 waterproof coats—Scottish Asbestos and Rubber Co., Ltd., £5 3s. 6d. each (recommended) mended).

DEMOLITION

Brentford and Chiswick, Middx.—Demolition of 1 and 2 Town Meadow for B.C.—Leonard Perlin, Ltd., 411-413 St. Margarets Road, Isleworth, £76 (recommended); A. E. Coles, £110; F. Coyle and Co., Ltd., £97: and R. Rumble, £80.

Consett, Dur.—Demolition of former fire station in Park Avenue for C.C.—

A. Golightly and Sons, Ltd., Garmondsway Drift, Bishop Middleham, Coxhoe, £452.

Drift, Bishop Middleham, Coxhoe, £452.

asington, Dur.—Demolition of air-raid
shelters at Easington Colliery, County and
Modern Schools for C.C.: A. Blair.
Whessoe Road Garage, Darlington,
£2,410 (recommended).
riern Barnet, Middx.—Demolition of piggeries and site clearance at Beaconsfield
Road for U.D.C. E. A. Start, engineer—
F. C. Payne, 21 Barnhurst Path, South
Oxhey, Watford, Herts., £375.
[ertford.—Demolition and improvement of
Mill Bridge property for B.C.—W. R.
Gough, Dobb's Weir Road, Roydon,
Essex, 60 (recommended); R. Perring, £275.

eamington Spa, War.—Demolition of

Gough. Dobb's Weir Road, Roydon, Essex, 60 (recommended); R. Perring, £275.

Leamington Spa, War. — Demolition of premises in the Althorpe Street clearance area for B.C.—David Thomas and Hill, Ltd., 1 Chapel Street, Leamington Spa (recommended, in lieu of previous tender).

Manchester.—Demolition of following for City Council: At Rusholme Road redevelopment area—W. Sutcliffe, Rochdale; temporary trestle bridge over the railway in connection with reconstruction of School Lane Bridge, Didsbury—Direct Labour; chimney shaft at Nell Lane Cleansing Depot—R. Pennington and Co. (Construction), Ltd., 34 Moorfields, Liverpool, 2 (recommended).

Shrewsbury, Salop.—Demolition of chimneys and making good thereafter at Shelton Hospital for the Birmingham Regional Hospital Board—Shrewsbury Building Co., Ltd., 8 New Street, Shrewsbury, £2,890 (recommended).

Smethwick, Staffs.—Demolition of 196 Grove Lane for B.C.—W. J. Law and Sons, 7 Hanbury Croft, Birmingham, 27, £148 (recommended).

Walthamstow, Essex.—Demolition of (a) 57 Blackhorse Road, and 11, 12, 13, 14, 15 and

mended).

Walthamstow, Essex. — Demolition of (a) 57
Blackhorse Road, and 11, 12, 13, 14, 15 and 16 Courtenay Place and (b) 4 and 6 The Drive, and outbuildings at 2 The Drive for B.C.—(a) Charles Griffiths, Ltd., Ripple Road, Barking, £600, and (b) Clarke (Plant Hire), Ltd., 1a Tower Road, Epping, Essex, £225 (recommended).

ELECTRICAL

urham.—Renewal of electrical installation at Chilton County Boys', Girls' and Infants' Schools and at Hunwick County and Modern Schools for C.C.—J. Paterson and Co., 17 Coniscliffe Road, Darlington, £2,955 and £3,020, respectively (recommended).

Eccles, Lancs.—Electrical installation for 102 flats at Philip Street, etc., and 90 flats at Egerton Steret for B.C.—E. Soper and Co., Ltd., 1 Hulme Hall Avenue, Hulme Hall, Cheadle, Ches., £3,596 and £4,073, respectively (recommended).

Edmonton, Middx.—Electrical installation for bock C at Snells Park redevelopment for B.C.—Holmes and Larkinson, 33 Newington Green. London, N.1, £4,678.

Harrogate, Yorks.—Installation of vehicle-actuated traffic signals at junction of Ripon Road and Skipton Road for B.C.—Siemens and General Electrical Railway Signal Co., Ltd., East Lane, Wembley, Middx., £1,364 (recommended).

Lichfield, Staffs.—Electrical services for cen-

Co., Ltd., East Lane, Wembley, Middx., £1,364 (recommended).

Lichfield, Staffs.—Electrical services for central sterile supply department at Victoria Hospital Board—Parker Winder and Achurch. Ltd., Broad Street, Birmingham, 1, £639 (recommended).

Luton, Beds.—Rewiring of 281 B.I.S.F. houses at Ashcroft Road estate for B.C.—J. and J. Burtenshaw and Partners, Ltd., Luton, £6,478 (recommended).

Manchester.—Following for City Council: Installation of two passenger lifts at Elizabeth Gaskell College Hostel and two passenger/goods lifts at Central Technical College—Pickerings, Ltd., Stockton-on-Tees, and A. and P. Steven, Ltd., Glasgow; electrical installation work at Bradford Road redevelopment area—Sadler and Kinsey, Ltd., 62 George Street, Manchester, 2; replacement of passenger lift in central library—A. and P. Steven, Ltd., Glasgow (recommended).

Middlesbrough, Yorks.—Provision of additional signal faces at the Kings Road and Cargo Fleet Lane junctions with Longlands Road for B.C.—Siemens Edison Swan, Ltd., Spennymoor, £774 (recommended).

Seaham Harbour, Dur.—Electrical installation at R.C. (Aided) Modern School for C.C.

Ltd., Spennymoor, £774 (recommended).

Seaham Harbour, Dur.—Electrical installation at R.C. (Aided) Modern School for C.C.—T. Mitchelson (Electrical), Ltd., 22 West Street, Gateshead, 8, £842 (recommended).

Smethwick, Staffs.—Installation of electricity in the gymnasium and stadium at Hadley playing fields for B.C.—Direct Labour, £3.614 (recommended).

Southend-on-Sea, Essex.—Provision of traffic signals at junction of Tylers Avenue and High Street for B.C.—S.G.E. Signals, Ltd., £1,855 (recommended).

Stourbridge, Worcs.—Electrical services for the boilerhouses at Corbett Hospital for the Birmingham Regional Hospital Board —Midlands Electricity Board, £1,889 (recom-

mended).

Sutton Coldfield, War.—Electrical services for bulk stores and mortuary at Good Hope Hospital for the Birmingham Regional Hospital Board—G. F. Thorne (Stafford), Ltd., 58 Goal Road, Stafford, £3,737 (recom-

Ltd., 58 Goal Road, Stafford, £5,737 (recommended).

Wallasey, Ches—Following for B.C.; Electrical installation to 42 units of accommodation in Union Street—F. H. Ashworth, Wallasey Installation of 978 electric power socket outlets in pre-war houses in the Leasowe area—W. Cottrel, Liverpool

FENCING

FENCING

Brentford and Chiswick, Middx.—Following for B.C.: Renewal of boundary fence between school and houses on east side of Carville Crescent at Lionel Road School—Metropolitan Concrete Works, Ltd., East Molesey, £752; fencing works at Belmont, Brentford, St. John's R.C. and Staveley Schools and Riverside Lands Playing Fields—Peerless Fence and Products, Ltd., Uxbridge, £1,979 (recommended).

Dagenham, Essex. — Provision of fencing and gates at Limbourne Avenue estate for B.C. — A. J. Binns, Ltd., 105 St. Pauls Road, London, N.I. £2,141 (recommended).

Road, London, N.I. £2,141 (recommended).

Hertford.—Replacement and repair of rear
fences to houses at the Camp's Hill and
Bengeo housing estate for B.C.—R. W.
Rickett (Fencing) Ltd., 107 Rye Road,
Hoddesdon, £8,137 (recommended, subject
to Ministry approval); Blakeney and
Strange (Fencing), Ltd., £9,594; and
Peerless Fence and Products, Ltd., £10,360.

GAS AND WATER SUPPLY

Willesden, Middx.—Gas installation for housing development at the cinema site, South Kilburn, for B.C.—North Thames Gas Board, £1,416.

HEATING AND VENTILATING

Durham.—Provision of a heating and hot water installation at the Junior and Senior Training Centre for C.C.—J. A. Scanlon, Lanchester, £6,700.

Huddersfield, Yorks.—Heating and hot water installation at new home for aged, Reinwood estate for B.C. S. M. Richmond, borough architect—Brook Bros. (Heating Engineers), Ltd., Ouzlewell Lane, Wakefield.

held.

Lichfield, Staffs.—Mechanical services for cenichneid, Staffs.—Mechanical services for central sterile supply department at Victoria Hospital for the Birmingham Regional Hospital Board—Edgar Toon, Ltd., Bath House, Mountrath Street, Walsall, £856 (recommended).

uton, Beds.—Installation of heating in the new hangar at the Airport for B.C.—J. B. Jackson and Partners, Ltd., 167 Millbank, London, S.W.I, £22,298 (recommended).

London, S.W.I., £22,298 (recommended).

Manchester. — Supply and erection of new boilers and oil-firing equipment at the central fire station for City Council—Craig and Mills, Ltd., 426a Wilbraham Road, Manchester, 21 (recommended).

Salford, Lancs.—Central heating installation and new hot and cold water services at Ingleside, Oakwood Park, for City Council—Ellesmere Engineering Co., Ltd., Pennington Street Works, Walkden, Manchester, £4,150 (recommended).

Sutton Coldfield, War. — Mechanical services for bulk stores and mortuary at Good Hope Hospital for the Birmingham Regional Hospital Board—K. L. Paton Co., Ltd., 1 King Alfreds Place, Birmingham, 1, £3,336 (recommended).

Walsall, Staffs.—Provision of fuel oil tank and

(recommended).

Walsall, Staffs.—Provision of fuel oil tank and accessories in connection with installation of emergency standby package boiler at Manor Hospital for the Birmingham Regional Hospital Board—Edgar Toon, Ltd., Bath House, Mountrath Street, Walsall, £722 (recommended).

(recommended).

Willesden, Middx. — Following for B.C.: Provision of Asoot water heaters for housing development at the cinema site, South Kilburn,—North Thames Gas Board, £5,160; heating installation at 15, 17 and 19 Park Avenue — Nye and Langstone, Ltd., Friary Works, Palmerston Road, London, N.W.6, £2,147.

HOUSING SCHEMES

Brentford and Chiswick, Middx.—Thirty-six flats and 21 garages at 7-21 (odd) Ox-ford Road North, and 35 Wellesley Road, Chiswick, for B.C.—Circle Construction Co., Ltd., 65 Wembley Hill Road, Wembley £89,944 (recommended, subject to Ministry approval); W. H. Gaze and

Sons, Ltd., £98,836; M. Howard (Mitcham), Ltd., £99,192; Humphreys, Ltd., £97,412; Kirk and Kirk, Ltd., £94,916; Perrys (Ealing), Ltd., £98,786; Speirs, Ltd., £96,369; and Tersons, Ltd., £96,984.

Burry Port, Carms. — Eight flatlets at East Cottages, New Street, for U.D.C. 1. E. Vaughn Evans, engineer and surveyor—Thomas Rees and Sons, Burry Part, £1,638 per flatlet (accepted); Glyndur Griffiths, £1,716 per flatlet.

Chepstow, Mon.—One hundred and seventy Easiform houses, roads and sewers at Caldicot 7 site for R.D.C.—John Laing and Son, Ltd., Mill Hill, London, N.W.7.

Cricklade and Wootton Bassett, Wilts.—Fourteen houses and six bungalows (brick), Lyneham, for R.D.C., including site and substructure works, drains, water services, fences, etc. J. C. Grindley, engineer and surveyor—Wallis and Co., 147 High Street, Wootton Bassett, Swindon, Wilts., £38,351.

Wootton Bassett, Swindon, Wilts., £38,351.

Cwmbran, Mon.—Flats, houses. bungalows and garages, contracts 56 and 57, for Development Corporation. J. C. P. West, development architect—Taverner (Contractors), Ltd., Clifton Road, Stow Hill, Newport. Estimated cost £115,000. Work to commence this month.

Daventry, Northants.—Two bungalows at Woodford Halse for R.D.C.—Adkins and Cooper, Ltd., Staverton, £2,760.

Eastbourne, Sussex.—Following for B.C.: Foundacion work for the erection of a block of flats in the Bourne Street clearance area —West's Piling and Construction Co., Ltd., Columbia House, Aldwich, London, W.C.2, £4,602 (recommended); Frankipile, Ltd., £5,379.

—West's Piling and Construction Co., Ltd., Columbia House, Aldwich, London, W.C.2, £4,602 (recommended); Frankipile, Ltd., £5,379.

Twelve flats adjoining Green Street Farm Cottages—William Ellis (Etchingham), Ltd., £tchingham, £20,100 (recommended); Beamish, Ltd., £21,608; W. Llewellyn and Sons, Ltd., £22,869.

Edmonton, Middx.—Provision of doors for block B at Snells Park redevelopment for B.C.—Walter Lawrence and Son, Ltd., \$23,869.

Freebridge Lynn, Norfolk.—One pair three-bedroom houses, four pairs two-bedroom bungalows, complete with drainage works, house paths and fences, etc., Grimston, Chequers Road, for R.D.C. Lea, Milney and Wardley, architects, 4 Market Hill, Huntingdon—William Rudd, Ltd., Middleton Road, Leziate, King's Lynn, £14,357 (accepted, subject to Ministry approval); W. H. Hill (Gayton), Ltd., £16,678.

Ipswich.—Seven aged persons' bungalows and four garages at Berners Close and eight

aged persons' bungalows at Taylor Road, Earlham (West) estate for City Council—W. F. Pointer and Sons, Ltd., 86 Hotblack Road, Norwich, £9,924, and T. Gill and Son (Norwich), Ltd., Hall Road, Norwich, £10,898 (recommended).

£10,898 (recommended).

Leeds.—Following for City Council: Two 10storey blocks of flats, 26 garages and four
invalid carriage stores and site works at
Meynell Street—Myton, Ltd., Green Lane,
Leeds, 16, £274,283; 121 dwellings and 87
garages on the Greenside estate—Harlow
and Milner, Ltd., 33 Warrengate, Wakefield,
£258,757 (recommended, subject to Ministry
approval).

£258,757 (recommenues, suc), approval), approval), anchester.—Sub-contracts for the following for City Council: (Contract 332) Glebelands Road, Baguley, and (341) Ossington Walk, Northern Moor—bricklaying—Manning and Leach, Baguley, Manchester; walk, Northern Moor-bricklaying—Manning and Leach, Baguley, Manchester plumbing—T. E. Talbot, Ltd., 72 Leonard Street, Burslem, Stoke-on-Trent; (356) Heywood — roofer — Charles Fildes, Ltd., Warrington; plasterer—Thomas Bros, Ltd., Stockport; plumber—B. and J. Plant, Ltd., Sheffield; painter—H. S. Hollinshead, Ltd., Manchester.

Sheffield; painter—H. S. Hollinshead, Ltd., Manchester.

Market Harborough, Leics.—Twelve Gregory houses at Smeeton Westerby and Church Langton for R.D.C.—Drury and Co., Ltd., The Grange, Wigston Fields, Leicester, £117,253. Work just commenced.

Smethwick, Staffs.—Following for B.C.: 21 one-bedroom flats in three-storey blocks for aged persons at Perry Hill—Francis N. Adams, Ltd., 54 Stratford Road, Birmingham, 11, £43,205 (recommended, subject to Ministry approval).

Sub-contractors for the eight-storey block of flats, redevelopment site 2: painting—T. E. Cundy and Sons, Ltd.; plastering—J. Comer, Birmingham; glazing—John Downes, Ltd., Walsall; lightning conductors—W. J. Furse and Co. Ltd., Birmingham; floor tiling—Marley Tile Co., Ltd., Sevenoaks.

Redevelopment site 4 (Cheshire Brewery): piling—Frankipile, Ltd., London, S.W.I; reinforced concrete frame for multi-storey blocks—Concrete (Midlands), Ltd., Birmingham; electrical installation—Williams Bros. (Electrical), Ltd., Birmingham (recommended).

ingham; electrical installation—William; Bros. (Electrical), Ltd., Birmingham (recom

mended).

South Shields, Dur.—One hundred and seven houses and 15 garages in the Reading Road development area for B.C. John Reid, borough engineer—W. Veti (Builders), Ltd., Station Road, Fulwell, Sunderland, £154,827.

Tottenham, Middx.—One hundred and twelve dwellings at Markfield redevelopment,

contract D. for B.C. — Hawker-Smith, Ltd., I West Street, Erith, Kent, £310,567 (recommended, subject to Ministry ap-

watford, Herts.—Following for B.C.: Two houses at Cassiobury Park (for the park keeper and foreman in charge)—Stephen Fitzgerald, 4 Westland Road, Watford, £5,474 (recommended in lieu of previous

tender).

Provision of old people's flats at Bright-well Road—Woodside Builders, Ltd., 92
Cecil Street, Watford, £34,355 (recommended, subject to Ministry approval).

Willesden, Middx.—Following for B.C.: Provision of metal windows for blocks B, C, D, and E at Willesden Lane—John Thompson and Beacon Windows, Ltd., Beacon Works, Ettingshall, Bilston, Staffs., £3,024.

Beacon Works, Ettingshall, Bilston, Staffs., £3,024.

Sub-contractors for development at the cinema site, South Kilburn: plumbing services—Ellis (Kensington). Ltd., 10 Kendrick Place, London, S.W.7, £22,780; sanitary fittings and ironmongery—W. N. Froy and Son, Ltd., Brunswick Works, King Street, London, W.6, £5,086 and £1,048, respectively; windows — John Thompson Beacon Windows, Ltd., £7,319.

Witney, Oxon. — One pair of houses at The Fosseway, Brize Norton, and one pair at Millwood End, Long Hanborough, for R.D.C. J. Smith, Didbury Neave and Partners, quantity surveyors, 39 Castle Street, Luton, Beds.—W. Townsend and Son, Finstock, Oxford, £4,101, and A. Dalman. 29 The Garth, Yarnton, Oxford, £4,115, respectively.

Woolwich.—Two hundred and fifty-two dwellings at Glyndon redevelopment area, stage 1, for B.C.—Direct Labour, £759,933 (recommended).

Wortley, Yorks.—Nine blocks of two two-bedroom flats and all ancilled.

(recommended).

Wortley, Yorks.—Nine blocks of two twobedroom flats and all ancillary works at
Oughtibridge, near Sheffield, for R.D.C.
Arthur Wikeley, engineer — Corbett Bros.
Grenoside, Sheffield. Work commenced.

MATERIALS AND SUPPLIES

Dagenham, Essex.—Supply of copper tube and fittings for Limbourne Avenue estate for B.C.—C. S. Cadel and Co. (London), Ltd., Stanley Works. Osborne Road, Thornton Heath, Surrey, £1,116 (recom-

Ltd., Stanley Works, Osborne Road, Thornton Heath, Surrey, £1,116 (recommended).

Durham.— Supply of 5,000 lin. ft. of Hin. bore galvanised steel tubing for C.C.—Wellington Tube Works, Ltd., Tipton Staffs., 1/5,62d. per lin. ft. (recommended).

Smethwick, Staffs.—Supply of 1,000 dustbins with lids and bins as required without



COMPRESSORS

Portable & Truck-mounted

Also

ROAD ROLLERS CONCRETE MIXERS **DUMPERS** SMALL TRENCHERS **POWER GRADERS** DINKUM DIGGERS **CRAWLER SHOVELS** VIBRATORY ROLLERS PUMPS, ETC.

Please send your enquiries to:

Head Office and Plant Depot: SANDY LANE, LITTLEMORE, OXFORD Branch Office and Plant Depot: WINNERSH, WOKINGHAM, BERKS.



JOHN ALLEN & FORD PLANT

HIRE

OXFORD 78241 WOKINGHAM 2175 vo rk en rd, us

nt-92 m

d.,

en-

ks, nd hn 19. he at for

ind

al-rd,

rel.

ell-ffs.,

lids for B.C.—Biringham Co-operative Society, Ltd., 27 High Street Birming-ham. 4, £1 11s. 10½d. per bin, and £1 6s. 11d. per bin, respectively (recomended).

PLANT AND MECHANICAL TRANSPORT

Durham. — Supply of a Commer 30cwt. forward control vehicle with diesel engine for C.C.—Minories Garage, Ltd., Darling-

forward control vehicle with diesel engine for C.C.—Minories Garage, Ltd., Darlington, £802.

Eastbourne, Sussex. — Supply of one Bristol Perkins P.3/144 diesel engine and fitted with a bulldozing blade for refuse tipping for B.C.—H. A. Saunders, Ltd., 836 High Road, London, N.12, £2,730; (recommended): Otus Plant Co., Ltd., £3,150; David Brown Construction Co., Ltd., £3,150; David Brown Construction Co., Ltd., £3,375; Saville (Tractors), Ltd., £3,684.

Heston and Isleworth, Middx.—Supply of three 16 24 cu., yd. capacity hydraulic compressor-type refuse collection vehicles with petrol engines for B.C.—Dennis Bros., Ltd., Guildford, £9,141 (recommended).

Luton, Beds.—Supply of following for B.C.: Two Commer/Cob light vans, two Karrier Blenheim type chassis, each mounted with an all-steel, seven-seater, double cab and 22-30 cu. yd. capacity Blenheim compressing refuse collection body, including trailer drawbar, four 6 cu. yd. capacity low-loading refuse collection body, including chassis mounted with single cab, power hydraulic end tipping gear and 11-14 cu. yd. capacity barrier loading refuse collection body, less interior barrier—Karrier Motors, Ltd., Biscot Road, Luton, £885, £6,118, £876 and £1,493, respectively; one Chasseide Loadmaster 700 loading shovel and ancillary equipment—Chaseside Engincering Co., Ltd., Station Works, Hertford, £1,980 (recommended).

Manchester.—Supply of four Commer Cob vans and three Commer 15cwt. chassis cabs for City Council—Rootes, Ltd., Middlesbrough, Forks.—Supply of following for B.C.: 5-ton Bedford tipping lorry—Sherwood Bros., Ltd., Middlesbrough, Simon Engineering (Dudley), Ltd., £1,622; 3-ton Bedford chassis/cab for hydraulic platform —Sherwood Bros., Ltd., Middlesbrough, Simon Engineering (Dudley), Ltd., £1,622; 3-ton Bedford chassis/cab for hydraulic platform —Sherwood Bros., Ltd., Middlesbrough, Simon Engineering (Dudley), Ltd., £1,622; 3-ton Bedford chassis/cab for hydraulic platform —Sherwood Bros., Ltd., Middlesbrough, Simon Engineering (Dudley), Ltd., £1,622; 3-to

brough, £788; two 5/7cwt. Ford Thames Anglia vans (replacements) — Nesham's Garages, Ltd., Middlesbrough, £733 (all recommended)

Frederick Road transport depot of a 12-ton Laycock heavy duty vehicle lift for City Council—Brown Brothers, Ltd., Salford, £1,141 (recommended).

£1,141 (recommended).

Shoreham-by-Sea, Sussex.—Supply of two diesel engine refuse collection vehicles each of 25 to 30 cu. yd. capacity for U.D.C.—Caffyns, Ltd., Kingsway, Hove, 3, £5,467.

Smethwick, Staffs.—Supply of following for B.C.: Two 24-ton three-wheeled road rollers—Aveling-Barford, Ltd., Grantham, Lincs. (recommended). Estimated cost £1,500.

£1,500.

One pedestrian-controlled refuse collection vehicle—Stanley Engineering Co., Ltd., Egham, Surrey, £516 (recommended).

Southgate, Middx.—Supply of one Karrier chassis (fitted with an 18/24 cu. yd. Blenheim refuse collection body) for B.C.—Rootes, Ltd., Devonshire House, Piccadilly, London, W.I, £2,896 (recommended).

Willesden, Middx.—Supply of one 5-ton and one 8-ton diesel roller for B.C.—Aveling-Barford, Invicta Works, Grantham, Lincs., £2,258 and £3,520, respectively (recommended).

PLAYING FIELDS, PARKS, ETC.

Bishop Auckland. Dur. — Playground at Tow Law R.C. (Aided) School for C.C.— A. Lax and Sons, Steels House Yard, West

Edmonton, Middx.—Following for B.C.: Laying out of the Wier Hall open space— Greensward (Contractors), Ltd., Weald Hall Lane, Thornwood, Epping, Essex, £3,130 (recommended).

(recommended).
Laying out of the Turin Road playing field—S. R. Jones and Co., Ltd., 14 Station Road, Southminster, Essex, £4,778 (recommended subject to C.C. approval).
ayes and Harlington, Middx.—Pump Lane improvement, contract 613, stage I, for U.D.C.—John Mowlem and Co., 91 Ebury Bridge Road, London, S.W.I, £48,181.
Road, Crook, £2,104 (recommended).

Keighley, Yorks.—Shaping of approximately two acres of Marley top and soiling 8in. thick for B.C.—Property Builders, Ltd., 294 Buxton Road, Steppinghill, Stockport, £660. Smethwick, Staffs. — Path and land drainage work in Victoria Park for B.C. — John Bates (Contractors), Ltd., 7a Birmingham Road, Hagley, Stourbridge, £2,176 (recommended).

RIVER AND FLOOD PREVENTION WORKS

Brentford and Chiswick, Middx.— Maintenance work of the river bank at Chiswick Bridge to Barnes Bridge for B.C.—Willment Bros., Ltd., 462 London Road, Isleworth (recommended).

ROADS, BRIDGES AND SITE WORKS

ROADS, BRIDGES AND SITE WORKS

Bishop Auckland, Dur.—Tar paving of playground at Stanhope Barrington C.E.
(Aided) School for C.C. —Tarmac Roadstone, Ltd., Stockton-on-Tees, £2,136
(recommended).

Chertsey, Surrey.—Central Addlestone development for U.D.C., comprising (a) site
clearance, including demolition of house
and bungalows; (b) construction of approximately 1,150 lin. yd. of 6in.-18in. diameter concrete surface water sewer, 375
lin. yd. of 6in. diameter glazed stoneware
soil sewer, 5,000 sq. yd. of carriageway,
8.800 sq. yd. of car park, and other appurtenant works N. C. Goldsmith, engineer and surveyor—Ebeneezer Mears, Ltd.,
Chertsey Road, Byfleet, £25,987.

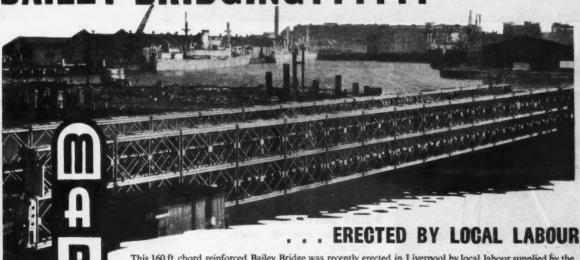
Dagenham, Essex.—Resurfacing of Forest
Road and surface dressing of Rose Lane
for B.C.—H. V. Smith and Co., Ltd., Walkden House, 3-10 Melton Street, London,
N.W.1, £770 and £2,640, respectively
(recommended)..

Durham.—Supply and laying of asphalt and

den House, 3-10 Melton Street, London, N.W.1, £770 and £2,640, respectively (recommended).

Durham.—Supply and laying of asphalt and other incidental works on trunk and county roads for C.C.: Approximately 238,000 sq. yd. of hot rolled asphalt with crushed rock aggregate—Limmer and Trinidad Lake Asphalt Co., Ltd., Newcastle upon Tyne, £129,148; approximately 34,000 sq. yd. of hot rolled asphalt with slag aggregate—Tarmac Roadstone, Ltd., Stockton-on-Tees, £15,981 (recommended, subject to M.T. approval).

Eccles, Lanes.—Following for B.C.: Surfacing of garage sites at Ellesmere Park—Shepherds (Rochdale), Ltd., Sumner Street, Rochdale, £1,727; making-up of Chatsworth Road (part) and Westminster Road (Rutland Road to Chatsworth Road)—Bituminous Surfacing, Ltd., Lime Bank Street, Manchester, 12, £7,547 and £3,848, respectively. Footpath reconstruction and surfacing works at Salters Lane, Tomlinson Street,



This 160 ft, chord reinforced Bailey Bridge was recently erected in Liverpool by local labour supplied by the Mersey Docks and Harbour Board and supervised by our Chief Bridge Engineer, Mr. D. A. Ball, A.M.I.C.E.,

Mersey Docks and Harbour Board and supervised by our Chief Bridge Engineer, Mr. D. A. Ball, A.M.I.C.E., A.M.I.MECH.E., A.M.I.STRUCT.E.

It spans the new 130 ft. wide river entrance lock under construction by the Board as part of a large dock reconstruction scheme. The bridge is designed in extra wide construction to carry a 42 ton NCK Excavator with distributing beams to carry the high bearing load.

Bailey Bridges for Sale, Hire or Hire Purchase

MABEY & JOHNSON LIMITED

54 Victoria Street London SWI Telephone: VICtoria 8025 (6 lines) Manchester Broughton 3959 . Glasgow Central 0261/2 . Works at Hatfield and Watford Fletcher Avenue. Strand Street, Irwell Place and Alma Street—G. Cox and Sons, Ltd. Bolton, £7,705, and Neuchatel Asphalte (Contracting), Ltd., Salford, £4,706, respectively (all recommended).

(Contracting), Ltd., Salford, £4,706, respectively (all recommended).

Failsworth, Lanes.—Supplying and laying approximately 9,117 sq. yd. of 1¼in. single course hot rolled asphalt by mechanical spreader, on Oldham Road, for U.D.C. E. D. Turner, engineer and surveyor—Asphaltic Roadways, Ltd., Manchester. Work commencing Sept.

Hertford.—Construction of the county market car park for B.C.—Home Counties Contracting Co., Ltd., Monks Yard, 24-28 Hertford Road, Edmonton, N.9, £5,213 (recommended, subject to Ministry approval): Carriageways, Ltd., £5,868; and W. and C. French, Ltd., £5,979; Waywarden, Ltd., £6,380.

Hove, Sussex.—Making-up roadway, providing and laying concrete kerbing and channelling and artificial stone slab paving, and other works in King George VI Drive for B.C. G. H. Clegg, engineer and surveyor—E. Jenkins and Sons (Ferring), Ltd., Littlehampton Road, Ferring, £4,787.

Leamington Spa, War.—Reconstruction of Spencer Street for B.C.—Tarmac, Ltd., Ettingshall, Bilston, Staffs., £845 (recommended, extension of contract).

Leatherhead, Surrey.—Resurfacing footpaths and rekerbing road, including 8,000 sq. vd.

Leatherhead, Surrey.—Resurfacing footpaths and rekerbing road, including 8,000 sq. yd. bituminous macadam, 1,400 sq. yd. cold asphalt, and 1,500 lin. yd. kerbing for U.D.C.—W. H. Gaze and Sons, Ltd., 139 Roehampton Vale, London, S.W.15, £4,405.

Roenampton Vale, London, S.W.15, 24,400. Leatherhead, Surrey.—Resurfacing of carriageways, comprising 1,418 tons bituminous macadam, 773 tons gravel asphalt for U.D.C.—Amalgamated Roadstone Corporation, Ltd., 15 Stanhope Gate, London, W.1, £6.608

Luton, Beds. — Completion of the clearways in phase I of the airport development programme for B.C.—G. Percy Trentham. Ltd., Pangbourne, Reading, Berks. (recommended, extension of contract). Estimated cost £8,000.

Manchester.—Following for City Council: Site works for 206 prefabricated garages at Wythenshawe—Direct Labour; private street

works in Milverton Road and Denison Road, Victoria Park—Bituminous Surfacings, Ltd., Manchester; road improvement at junction of Victoria Avenue East and Rochdale Road, Blackley—Direct Labour (recom-Road, mended). Widening

Norwich. — Widening of carriageways in Colman Road (from Earlham Road to George Borrow Road). Daniels Road, Lakenham Road and Barrett Road for City Council—Direct Labour (recommended). Estimated cost £68,500.

Prestwick, Lancs.—Following for B.C. J. Theo. Kilner, borough engineer: Makingup of St. Austell's Drive (part)—G. Cox and Sons, Ltd., Fletcher Street, Bolton. Work to commence shortly.

Carriageway resurfacing in hot rolled asphalt, cold asphalt and bituminous macadam on trunk, classified and district roads—The Neuchatel Asphalte Contracting, Ltd., Whit Lane, Pendleton, Salford. Work to commence within two months.

Swadlincote, Derbys.—Following for U.D.C.:

Swadlincote, Derbys.—Following for U.D.C.: Resurfacing to High Street—Constable Hart and Co., Ltd., St. James's Chambers, St. Lames' Street, Derbys.

Swadlincote, Derbys.—Following for U.D.C.:
Resurfacing to High Street—Constable
Hart and Co., Ltd., St. James's Chambers,
St. James' Street, Derby.
Footpath works, Bretby Road, Newhall—
Breedon and Cloud fill Limeworks, Ltd.,
Breedon-on-the-Hill, Derbys., £1,371.

Tottenham, Middx.— Stonebridge Brook improvement scheme, contract 6, for B.C.,
comprising construction of a new culvert
in Seven Sisters Road from Durnford
Street to a point south of St. Ann's Road
junction and includes short lengths of
culvert from Templeton Road to Hermitage
Road and in the vicinity of the Harringay
Stadium. J. D. and D. M. Watson, consulting engineers, 67 Tufton Street, London,
S.W.1 — Howard Farrow, Ltd., Highfield
Road, London, N.W.11, £104.855 (recom-

mended)

mended).

Watford, Herts.—Construction of a car park at the rear of the Town Hall for B.C.—Home Counties Contracting Co., Ltd., 24 Hertford Road, London, N.9 (recommended, subject to Ministry approval). Estimated cost £17,000.

Wortley, Yorks.—Construction of roads and sewers at Piece End for R.D.C. Arthur Wikeley, engineer—Lileworth Contractors, Ltd., Norfolk Park Road, Sheffield, 2.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Aethwy, Anglesey.—Construction of sewerage scheme for R.D.C.—P. J. Mangan and Co., Ltd., Ashton New Road, Clayton, Man-chester, 11, £118,000. Work commenced.

Co., Ltd., Ashton New Road, Clayton, Manchester, 11, £118,000. Work commenced.

Bridge-Blean, Kent.—Following for R.D.C.;
P. J. Thackray, engineer and surveyor:
Construction of works to prevent infiltration of surface water into sewer and drain manholes at Littlebourne—Bowzell, Ltd., Wellington House, Dover Road, Walmer, Deal, £2,075.
Chislet (Upstreet) sewerage scheme, including the construction of approximately 2,352yd. of 6in. diameter sewer and 2.686yd. of 4in. diameter rising main, the erection of a pumping station, together with the construction of house connections and pail closet conversions—Bowzell, Ltd., Wellington House, Dover Road, Walmer, Deal, £42,906 (accepted); R. Savill, £43,389

Cricklade and Wootton Bassett, Wilts.—
Laying 6in. diameter asbestos-cement sewers,

Deal, £42,906 (accepted); R. Savill, £43,389.

Cricklade and Wootton Bassett, Wilts—
Laying 6in, diameter asbestos-cement sewers,
Restrop Road and Battlewell to Reids Piece,
Purton, for R.D.C. J. C. Grindley, engineer
and surveyor—North Wilts. Quarrying Co.
(The Quarrying and Civil Engineering Department of T. J. and R. C. Neal (Sherston),
Ltd.), Noble Street, Sherston, Wilts., £5,794.

Dagenham, Essex.—Extensions at Riverside
works, contract 1, for B.C.—George
Wimpey and Co., Ltd., 26 Hammersmith
Grove, London, W.6, £2,220.

Eastbourne, Sussex.—Construction of a 9in

Eastbourne, Sussex. — Construction of a 9in. foul water sewer from Marsden Road to the slaughterhouse for B.C.—Direct Labour recommended, subject to Ministry approval). Estimated cost £6,500.

recommended, subject to Ministry approval). Estimated cost £6,500.

Frimley and Camberley, Surrey. — Extensions to sewage disposal works for U.D.C. Willcox, Raikes and Marshall, consulting engineers, 33 Great Charles Street, Birmingham, 3,—R. J. Horton (Engineers), Ltd., Delph Road, Brierley Hill, Staffs., £346,290.

Harrogate, Yorks. — Drainage schemes A.5, A.6 and G.2 for B.C.—R. T. Haley and Co., Ltd., Hunsworth, Cleckheaton, £101,710 (recommended).

Leamington Spa, War.—Reconstruction of the sewer from Newbold Comyn Farm along part of Upper Holly Walk for B.C.—

ARPS TRENCHING MACHINERY



The A.R.P.S. L-12 trencher

THE NEW ARPS TRENCH DEVIL MODEL L-12

- DEPTH OF DIG: maximum 5' 6"
- TRENCH WIDTHS: 2", 4", 6", 8", 10" and 12"
- BOOM CONTROL: Hydraulic giving down pressure as well as lift.
- DIRT DISPOSAL: conveyor type may be put on either side quickly.
- NUMBER OF DIGGING SPEEDS in both forward and rearward directions; infinite - no limit.



View showing trenching boom

SOLE CONCESSIONAIRES IN U.K. AND EIRE

A. J. SAUNDERS (TRACTORS) LTD. STILTON, Nr. PETERBOROUGH

er o.

de

in. to ur ip-

Galliford and Sons, Ltd., The Heath Wolvey, Hinckley, Leics., £2,992 (recommended). Leeds.—Following for City Council: Construc-tion of sewers on the Knowsthorpe Heath.

Galliford and Sons, Ltd., The Heath, Wolvey, Hinckley, Leics., £2,992 (recommended).

Leds.—Following for City Council: Construction of sewers on the Knowsthorpe industrial estate—Walter G. Birch (Harrogate), Ltd., 63 Great George Street, Leeds, 1, £107,107; construction of sewers on the Iveson House light industrial estate—James W. Tait, Ltd., Moorside Works, Moorside Road, Bradford, 2, £7,781 (recommended).

Luton, Beds.—Following for B.C.: Supply for Charlton sewage purification works. J. D. and D. M. Watson, consulting engineers, 67 Tufton Street, London, S.W.1.—Approximately 8.500 sq. yd. of filter tiles—Naylor Bros., 62 Trevelyan Road, London, S.W.17, 15s. 14d. per sq. yd.; approximately 17,000 cu. yd. of filter medium—Summerfield and Long, Ltd., 37s. 9d. per cu. yd.; erection of six biological filter distributors—Hartleys (Stoke-on-Trent), Ltd., Kearsley Chambers, Stoke-on-Trent), Ltd., Kearsley Chambers, Stoke-on-Trent), Edd., Walter Chambers, Stoke-on-Trent), Ltd., Rearsley Chambers, Stoke-on-Trent), Ltd., Essex Road, Hoddesdon, Herts., £994 (recommended).

Drainage works for the airport development, stage I—P. Collins (Contractors), Ltd., Villiers Street, Strand, London, W.C.2, £27,709 (recommended).

Middlesbrough, Yorks.—Infilling of the disused length of the Snowdon Road sewer between West Street and the outfall with fly-ash slurry, including sealing all leaks in the cast-iron sewer for B.C.—John W. Pearson and Co., Stainton-in-Cleveland, £9,323 (recommended).

Norwich.—Connecting sewer at the junctions by Westwick Street and Heigham Street for City Council: Direct Labour (recommended). Estimated cost £3,300.

Ramsgate, Kent.—Construction of the Cliffsend and Manston sewerage scheme for B.C.—John W. Pearson and Folly Schement Scheme for Schement Sewer at London and North Orbital Roads, for City Council—T. Cleary and

proval)).

t, Albans, Herts.— Construction of a foul water sewer at London and North Orbital Roads, for City Council — T. Cleary and Co., 29 Elgin Avenue, Kenton, Harrow, Ello,007 (recommended).

hrewsbury, Salop.—Supply of following for Monkmore Sewage Works reconstruction for B.C.: (Contract 6) Sludge pumps—Lee, Howl and Co., Ltd., Tipton, Staffs.; (8) flow recorders—The Lea Recorder Co., Ltd., Manchester; (7) recirculation pumps—

Gwynnes Pumps, Ltd., London (provisionally accepted).

Southend-on-Sea, Essex.—Drainage works in parks for B.C.—S. C. Stacey and Sons (Contracts), Lawn Lane, Springfield, Chelmsford, 7s. 6d. per yd. for 4in. pipes and 7s. 5d. per yd. for 3in. pipes (recommended).

mended).

Tipton, Staffs.— Following for B.C.: Culverting of the watercourse at Gospel Oak—Perks and McRobie, Ltd., 31 Castlecroft Lane. Wolverhampton, £4,491 (recommended, subject to Ministry approval).

Subsoil investigations for the proposed sewerage scheme—Geotechnical and Concrete Services, Ltd., £2,220 (recommended).

Walthamstow, Essex.—Relief sewer works at Valonges Avenue, Alders Avenue and Bedford Road for B.C.—Gabriel (Contractors), Ltd., Palmers Lane, Enfield Middx., £3,283 (recommended).

STREET LIGHTING

STREET LIGHTING

Bridgnorth, Salop,—Remaining work included in the third phase of the street lighting programme for B.C.—Midlands Electricity Board, £2,353 (recommended).

Durham.—Overhead lighting for C.C.—Atlas Lighting, Ltd., Thorn House, Upper St. Martins Lane, London, W.C.2, £1,353 (recommended).

Friern Barnet, Middx.—Removal of 88 steel columns and the crection of 88 group B concrete columns, together with the installation of lanterns, gear, etc., for U.D.C. E. A. Start, engineer—Cohen Bros. (Electrical), Ltd., Electric House, 11 King Edward Buildings, Bury Old Road, Manchester, 8, £520.

Frinton and Walton, Essex.—Supply and erection of 37 installations comprising concrete columns with side-entry colour corrected mercury lanterns at Walton-on-the-Naze for U.D.C. J. H. Jordan, engineer—Phosco, Ltd., Ware, Herts., £799 (subject to Ministry approval).

Heston and Isleworth, Middx.—Supply of 250 mild steel standard lamp columns with circular base compartments for group B at district roads for B.C.—The Revo Electric Company, Ltd., Tipton, Staffs.—£10 5s. each (recommended).

Luton, Beds.—Supply of 720 new base class B concrete lighting columns, including swan-neck brackets, for B.C.—Eleco, Ltd., Sphere Works, St. Albans, Herts., £8 10s. each (recommended).

Manchester.—Supply of street lighting equipment at Handforth overspill site for City Council—General Electric Co., Victoria Bridge, Manchester, 3, and Concrete Utilities, Ltd., 11 Albert Square, Manchester, 2.

Middlesex.—Supply and erection of 14 steel columns 30ft, high, complete with 400-W

chester, 2.

Middlesex. — Supply and erection of 14 steel columns 30ft, high, complete with 400-W

mercury lanterns and gear at Wraysbury Roundabout, Staines By-pass, for C.C.— Abacus Municipal, Ltd., Sutton-in-Ashfield, Notts.

Notts.
Southend-on-Sea, Essex.—Supply and installation of new lighting on the Eastern Taxiway at the Airport for B.C.—G.E.C., Ltd., Whitehouse Road, Colchester, £1,873 and Eastern Electricity Board, £2,048, respectively (recommended).

Tipton, Staffs.—Supply and installation of class B lighting along 13 unclassified roads in the borough for B.C.—Midlands Electricity Board, £3,303 (recommended, subject to Ministry approval).

Watford, Herts.—Supply of 250 Byway X columns and 250 Phosware P.122 lanterns with sodium lamps and ancillary equipment for use in side streets for B.C.—Concrete Utilities, Ltd., Great Amwell, Ware, £10 3s. 6d. each, and Phosco, Ltd., Ware, £9 13s. 6d. per set, respectively (recommended).

GOVERNMENT CONTRACTS

Ministry of Works.—Contracts placed for week ended July 22:

ended July 22:
Cheshire: Wellington Road, Nantwicherection of employment exchange for Ministry of Labour—J. H. Molyneux (Northwich), Ltd., John Street, Northwich. Cumberland: Rocket Establishment, Spadeadam—further works—Benson and Dixon, Ltd., Fair Hill, Haltwhistle, Northumberland.

Spadeadam—furtnea
Dixon, Ltd., Fair Hill, Haltwnissen,
umberland.
Essex: Clacton-on-Sea—erection of telephone exchange—C. H. Chaston, Ltd.,
Clacton-on-Sea.
Kent: Oxford—telephone exchange—W. P.
Dunton Green, Sevenoaks,

Kent.
Lancashire: Telephone Manager's Office,
15-25 Church Street, Manchester—adapta-tions—F. Gannon and Son (Manchester),
Ltd., 64 Osborne Road, Levenshulme,

Manchester.

Lincolnshire: Head Post Office, Guildhall Street, Lincoln—adaptations—Wm. Wright and Son (Lincoln), Ltd., Park Street, Lincoln.

Northumberland: Ministry of Pensions and National Insurance, Benton, Newcastle upon Tyne—internal cleaning and redecorations—Adam Robertson and Son, 36 Leazes Park Road, Newcastle upon Tyne.

Nottinghamshire: Warsop—erection of telephone exchange—C. Millward and Co., Ltd., Bennerman Road, Kirkby-in-Ashfield.

Warwickshire: Joint office building, Gosford Street, Coventry—internal and external decorations—T. E. Cundy and Son, Ltd., 28 Belgrave Road, Leicester.



ASPHALTE . TARMACADAM .

LONDON : BARROW : BIRMINGHAM : CANTERBURY : EXETER : GLASGOW : LINCOLN : LIVERPOOL : MANCHESTER : NEWCASTLE

Universal

Double-Locking AIR HOSE COUPLINGS

Lowest prices - highest quality!

DESCRIPTION	SIZE AVAILABLE			
37E Tail Piece	8"	+"	1"	10
40E Male Thread	8"	4"	#"	1"
IE Female Thread	2"	10	2"	10

BROWN & TAWSE PLANT LTD.

AMBROSE ST., MANCHESTER 12

Telephone: EASt 2231 (5 lines)

Please write for illustrated leaflet and guotations







CONCRETE POURING 2

- ★ 10 to 27 cu. ft. capacity to suit discharge from standard mixers.
- * Normal or Reverse Handle for
- * Proved four leg lifting chains.
- * Circular Crane and Rollover Skips
- * Send for fully detailed literature.





Contractors & Industrial Equipment

31 Birmingham Street, OLDBURY, Birmingham Telegrams: Conquip, Oldbury Also branches at: Stoke-on-Trent, Stockport and London



12 TON RATCHET **JACKS HEAD and TOE** LIFT COMPLETE WITH HANDLES BRAND NEW

£12 each

L. W. VASS LIMITED AMPTHILL, BEDFORD. Tel: AMPTHILL 3255-6

SPECIALISTS DIVING

Cutting, Welding. xplosive work

DIVERS. FROGMEN AND PLANT HIRED IF PREFERRED

> Rates from £7 7s. per day.

UNDERWATER CONSULTANTS

Immediate and efficient teams available anywhere in the world

MARTIN WELDING AND CUTTING CO. LTD.

DARTFORD, KENT



JACK BRANCH (LONDON

293 BALLARDS LANE · FINCHLEY · N.12 Phone: HiLiside S068-9 Plant Manager: Mr. E. G. H. Parnell

CAMBRIDGE OFFICE: Phone: WATERBEACH 571

Antes Chathier would fill ROYSTON OFFICE: Phone: ROYSTON 3007



CRANE HIRE SPECIALISTS & LIFTING CONTRACTORS

* LIFTS UPETO 50 TONS

* DISTANCE NO PROBLEM

* JIBS TO 170 FEET

* 'PHONE BATH 78158 OR 78450

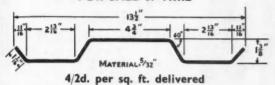
G. W. SPARROW AND SONS LIMITED LOWER BRISTOL ROAD . BATH SOMERSET



52

Neagron TRENCH SHEETING

FOR SALE or HIRE



Stock lengths of 6, 8, 10, 12, 14 and 16 feet Weight 8½ lbs. ft. run Driving caps available at 45/- each

Neagron (CONSTRUCTION) Ltd.

ABBEY HOUSE, VICTORIA STREET, LONDON, S.W.I Telephone: ABBey 5152 (5 lines). SULlivan 7626 (5 lines)



SPLIT-HEADS

This adjustable fixed leg Split-Head, with its simplicity of design, sturdy construction

and low cost, has a strong appeal to the price conscious buyer. Fitted with locking bolt, to prevent wobble when in an extended position, and to ensure rigidity.

Size	Height closed	Height open
2 3	1' 9" 2' 9" 4' 3"	2' 9" 4' 6" 6' 3"

AUDAX, CENTRAL AVENUE, WEST MOLESEY, SURREY Phone Molesey 6071 (8 lines



JIBS UP TO 120 ft. PLUS FLY JIBS

We have the largest Fleet of Crane Rigged 802s in U.K. LIFTING CAPACITY EXCEEDS 30 TONS

UNWAYS ROADS AND

(PLANT HIRE) LTD.,

26 VICTORIA STREET, LONDON, S.W.I.

Tel: ABBey 4905 or BRIDGEND 4163

SCOTNEY MADE TIMBER BUILDINGS ARE BRITAIN'S BEST

Scotney made timber buildings are Britain's best in design, construction and

We at Scotney's do not look upon a timber building, whatever its requirement, just another temporary affair to fill a gap before a permanent building is erected.

All our buildings are architect designed not only to fit in with local secretary but to be functional. Though we do supply many for temporary use, today you can see throughout the country many permanent Scotney buildings, for offices, shops, factories, schools, etc., that have been constructed by most up-to-date methods, incorporating the widest use of timber and other materials.

Scotney buildings can be erected quickly, saving much time and capital outlay.

You are invited to use the facilities offered by our special advisory department for imaginative timber construction in conjunction with modern materials.

TOM M. SCOTNEY LTD

BUILDING DIVISION, DESIGNERS, TIMBER ENGINEERS Dept. 141, ST. IVES, HUNTS. Telephone 2421 (4 lines)



Office Block for Messra. Fisons Pest Control Ltd.

" MACO" Pipe-Laying WINCH

to 2 TON CAP.

All-steel, light, efficient

> Pipe Dogs all sizes .

Write for Catalogue MAXIMIXAM CONCRETE MIXERS

> TRAILER AND STANDARD MODELS

7/5-5/31-4/3-3/2

Diesel, Petrol and T.V.O.



5/31 HIGH-SPEED TOWING MODEL

PETROL £165.0.0 DELIVERED

ENGINEERING LTD. DEPT. 457 FINCHLEY ROAD, TELEPHONE : HAMPStead 7481 (3 lines)

C

SELECTED ITEMS FROM STOCK:

TRACTORS AND SHOVELS

Drott 4-in-1 Tractor Shovel, Serial No. BD3346,	
new July, 1959	£2,250
BTD6 Angledozer, new 1957. Very good condition	£1,400
D4 Caterpillar Angledozer, 6U Series, 1959. Very good order	£3,000
Bray BL460 4-wheel drive Loading Shovel, new 1960	£3,950
Fowler VF Angledozer. Good working order after recent overhaul	£250

J.C.B. Hydra-Digga, new 1959, complete with Front End Loader and 24in. Digging Bucket and 12in. Ejector Bucket, and complete with power £1,700 steering. Excellent condition

CONCRETE MIXERS

5/3½ Blaw Knox and Winget, petrol engines, steel wheels. First-class condition each	£65
10/7 Stothert and Pitt, Petter or Lister diesel, hopper-fed, four steel wheels. Very good condition from	£195
10/7 Rex, Ruston diesel, closed drum, hopper- fed, four steel wheels, complete with Weighing Gear. Completely stripped, shot blasted and repainted	£285
14/10 Rex , electric, 400-440/3/50, complete with Weighgear, four steel wheels. First-class	

Weighgear, condition four steel wheels. £350 14/10 Rex, Ruston diesel, closed drum, hopperfed, four steel wheels, high or low discharge. Excellent condition £250

21/14 Stothert and Pitt, Petter twin diesel or electric, high or low discharge from £100

EXCAVATORS

19RB Excavator, 11000 Series, complete with Skimmer/Backacter Equipment or Dragline. This machine is in excellent condition following complete overhaul £2,350

43RB, new 1954, fitted with Dragline Equipment and new Face Shovel Equipment. Excellent condition but some repairs required to tracks. 19RB Skimmer/Backacter Equipment. First-class £450

Westwood & cu. yd. Double Rope Rehandling Grab £75 Reconditioned 19RB Skimmer Bucket £75 Reconditioned 33RB Ruston 5VPBN diesel engine

powered by 400/3/50 motor

BATCHING PLANT	
P.11 Portasilo, new 1960. As new	£350
20-ton Portasilo , complete with pullwey and aeration unit. Repainted and in excellent condition	£425
Road Machines 14 cu. ft. Twin Bucket Swing Weighbatcher. Completely checked over, shot	61.40
blasted and repainted	£140
Road Machines 3-bin Batchermatic Plant, with 35-ton Cement Storage Hopper. New 1959,	

GREENHAM EQUIPMENTS LTD.

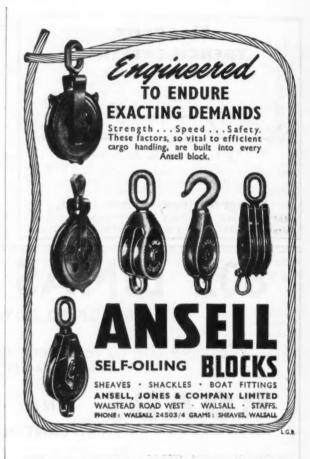
CLAYTON ROAD, RUISLIP ROAD, GREENFORD, MIDDLESEX

Let's ring VIKING 3651



£375

£995



We work Under Water. and on dry land

SURVEYS

CLEARANCE

WELDING

CUTTING

CONSTRUCTION

MAINTENANCE

Teams of expert Div-Engineers specialised equipment are on hand to operate anywhere in the United Kingdom . . . or the world.

Under Water Welding and Cutting Equipment, Diving Equipment, Welding Generators, Com-pressors, Cox's Bolt Gun Equipment and other plant for HIRE. Write for full details.



UNDER WATER WELDERS & REPAIRERS LTD.

ROATH BASIN, CARDIFF

Tel: 29631-2-3 (after hours: Gobion (Mon) 200, Penarth 5813 -or Rhoose 298) Scottish Office: 3 Royal Street, Gourock, Renfrewshire. Tel: Gourock 31635.

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

(Continued from page 668)

C R A N E S F O R M I R E,

18th. S GM Neals Fully Mobile Diesel Cranes,
18th. S GM Neals Fully Mobile Diesel Cranes,
18th. S Self-propelled Diesel Cranes,
18th. S Diesel Mobile Cranes, on pneumatics,
2-ton Neals Diesel Mobile Cranes, on pneumatics,
3-ton Jones NMS Diesel Mobile Cranes, on pneumatics,
18th. S MMS Diesel Mobile Cranes,
18th. S MMS DIEsel Diese

Tel.: TOTtenham 0401 (10 lines).

ROCK DRILLS—Several Unused ex M.O.S. Holman M.O.S. Holman 14 lines of the M.O.S. Holman 154 lines of the M.O.S. Holman 155 lines of the M.O.S. Holman 15

Telephone: Waltham Cross 22020.

RAN ES FOR SALE.

Neal 15cwt. Portable and Mobile.
Neal 4-ton Mobile.
Neal 4-ton Mobile.
Neal 6-ton Mobile.
Smiths 5-ton Mobile.
Neal 5-ton Mobile.
Neal 15-ton Mobile.
Neal

BULL DOZERS, MECHANICAL LOADING
SHOVELS and TRAXCAVATORS, etc. TIPPING
LORRIES, 5/7-ton, for HIRE.—HERNY FROUD, LTD.,
Harrow Manor Way, Abbey Wood, S.E.Z. Tel.:
WOOlwich 9538-9.

POS SALE, 8TD6 Drott 4-in-1, purchased October, 1958, and owner, in good order, Lying Essex, £2,000. — Apply MOBILE HAULAGE, LTD., 230 Tottenham Court Road, London, W.1. Tel.: Langham 7833/5.

Total Communication of the Com

FOR SALE, 110 c.f.m. 2-tool Portable COM
PRESSORS. — WILLIAM G. SEARCH, LTD
Whitehall Road, Leeds, 12. Tel. 639081 (10 lines)

CLASSIFIED ADVERTISEMENT RATES:

PLANT AND MISCELLANEOUS Four lines or less 14/-, and 3/- for every additional line.

Box number 1/- extra. Display £2 10s. per single column inch.

R CRIPPS AND CO., LTD., have the following Items of Contractors' Plant available for Items of Contractors' Plant available for Items of Contractors' Plant available for Items of Contractors Plant available for plets with Scarifier, hour meter reading 1,195 hours only. In really first-class condition throughout, £1,500.

Flat St. TRACTOR, complete with Hydraulic Angledozer, in exceptional condition, £800.

BTB TRACTOR, fitted with Hydraulic Bullgrader RACTOR, fitted with Hydraulic Bullgrader Caterillar D8 TRACTOR of the With Caterillar D8 TRACTOR. The Contract Could with operator's cab, £950.

Caterillar D8 TRACTOR, 2V Series, base machine plus Winch, in good working order at fitted with operator's cab, £950.

Caterillar D8 TRACTOR, 71 Series, with Bull/Angledozer, good, soud machine, £700.

Caterillar D4 TRACTOR, 71 Series, with Bull/Angledozer, good, soud machine, £700.

Nottingham (Tel. No. 71161); Manchester (Trafford Park 1658); Shildon (County Durham) (Tel. 261).

k 1659; Shildon (County Durham) (Tel. 261).

O A D I N G S H O Y E L S.

1959 Chaseside 800 T.C. 1 cu. yd. Bucket, Torque Converser, Cab. £1,450.

Sc Chaseside 700 1 cu. yd., Cab, power steering. £1,000.

5c Chaseside 500, 78 cu. yd. Digger Bucket, Cab. £850.

ST Bray Crawler, 1 cu. yd., Cab, Ford Diesel. £1,575.

sesside 12yd. Diesel Wire Rope Shovel, Ex Council. £275. 1956

1957 £1,575.
Chaseside 'zyd. Diesel Wire Rope Shovel, ex Council, £275.
New Bray four-wheel-drive and two-wheel-drive Shovels always in stock.
WILLIAM R. SELWOOD, LTD.,
Chandler's Ford, Hants. Telephone: 2981.

Chandler's Ford, Hants. Telephone: 2981.

WANTED.—Caterpillar and International TRACTORS and TRAXCAVATORS, especially D4, D7 and D8 size: Gallon and Caterpillar GRADERS; Aveling-Barrise: And Muir-Hill DUMPERS; Drott SKID SCRAPERS. Cardend 4-In-1; MOTONISES CRAPERS. Cardend 4-In-1; MOTONISES CRAPERS. Cardend 4-In-1; MOTONISES CRAPERS. Cardend 4-In-1; MOTONISES Dragline. 19RB, 22RB and N.C.K. 304.—AXWORTHV AND COMPANY, LTD. (Drotts for Hire). Straight Road, Old Windsor, Berks. Tel.: Windsor 3434 or 3384.

Road, UID Windsor, Berks. Tel.: Windsor 3434 Or 3304.

PECIAL ANNOUNCEMENT.—We have sold our two Lima 2400s and have one spare FORWARD SHOVEL EQUIPMENT for SALE. This has only done six weeks' work and, except for a little weathering, is mechanically as new.—PLANT SALES, LTD. 25 Castlereagh Street, London, W.1. PADdington 2663.(5.

MITCHELL'S PLANT SERVICES, LTD., can always offer an excellent range of use Weather! Il Hydraulic or Chaselde MECHANICAL SHOVELS. Price to sult all users.—Write or phone Palmers Lane, Enfeld, Middlessex. HOWard 3493.

F 9R SALE.

9B3 McKlernan-Terry PILING HAMMER, with Leg Guides.
Two 19R8 EXCAVATORS, with Dragline or Skimmer Equipments.
10-ton 2-motor Electric DERRICK, with 120ft. Jib and Bogies.
Sykes No. 734 and No. 8 Double Drum PILING WINCHES, each powered by Ruston Diesel Engine.
Six Johnson 1 cu. vd. and 1½ cu. vd. Diesel

WINCHES, each powered by Ruston Diesel Engine 1 cu. yd. and 1½ cu. yd. Diesel DIMPERS.

5-ton Butters Electric SCOTCH DERRICK, 120ft. ibi. complete with Bogles.

Two Stothert and Pitt S4T VIBRATING ROLLERS, each powered by Petter Diesel Engine. Ruston DIESEL LOCO., 2tt. gauge, 25/30-h.p. 400 STEEL TRENCH SHEETS, 8tt. long.

Larssen and Appleby-Frodingham STEEL SHEET PILES, Nos. 1, 2, 3 and 4 sections.

2-ton Neals NM MOBILE CRANE, 35ft. Jib, Ruston Diesel Engine.

Diesel Engine, pneumatics.
DUDLEY VALE, LTD.,
9 Palace Street, London, S.W.1. VICtoria 0252. 9 Palace Street, London, S.W.1. Victoria 0252.

IGHT RAILWAY MATERIAL FOR SALE.
3,000yd. 25lb. S.S. TRACK.
1,000yd. 20lb. B.S.S. TRACK.
New Lister Diesel LOCOS., from E45S.
One Montania Diesel LOCO., 23-ton, 24in. gauge.
Twenty 1yd. TIPPING WAGONS.
Auco Pressed Steel Lay-on SWITCHS.
2yd. 24in. gauge TIPPING WAGONS.
Maco Pressed Steel Lay-on SWITCHS.
POINTS and CROSSINGS and TURNTABLES.
POINTS and CROSSINGS and TURNTABLES.
WHEELS and AXLES. All gauges.
Maco AXLEBOXES.
PLATELAYERS' BOGIES. 4ft. 8½in. gauge.
M.E. ENGINEERING, LTD.,
457 Finchley Road, London, N.W.3.
Mengillm, London. 'Phone: HAMpstead 7481-2-3.

AIR COMPRESSORS for SALE.—Bellis and Morcom

Mengillm, London. Phone: HAMpstead 7481-2-3.

AIR COMPRESSORS for SALE.—Bellis and Morcom
A 2,450 c.f.m. 100 p.s.i., 550-h.p. motors:
500/2,500 c.f.m. unused Holland Rotary; 525 c.f.m.
Holman Type 1605 Broomwade 400 c.f.m. EH245;
300 c.f.m. EH240; 200 c.f.m. 223: 80 c.f.m. D21,
new 1950; also numerous others of all makes; and
AIR RECEIVERS from 1ft. to 9ft. dia., 100lb. to
1,000lb. w.p.—FRED WATKINS (ENGINEERING)
LTD., Coleford, Glos. Phone: Coleford 2271/5.

URGENTLY WANYED, 1988, 22786, 33RBe and N.C.K. 304 EXCAVATORS, fitted with Dragline or Face Shovel Equipments. Machines must be agood condition. Immediate inspection and settlement. Write GRAYSTON PLANT AND ENGINEERING.

A VALLABLE FOR HIRE: EXCAVATORS, BULL-DOZERS, DUMPERS, MIXERS, Coles CRANES, etc. All classes of LORRIES, Including Low-loaders. AMEY'S AGGREGATES, LTD., Lower Wootton, Soars Hill, Oxford. Oxford 3542. FOR SALE, 33RB Dragline EXCAVATOR, Serial No. 4550, good working condition, £1,700. C. F. WILLIAMS, LTD., Turncroft Lane Sand Quarry, Bishop Street, Stockport. Tel.: STO 7096.

MARINE PLANT FOR HIRE.—All types of craft of constructional work, boring operations, diving, etc.—THOMAS BROS., 62 Sussex Road, East Ham, E.6. Telephone: Grangewood 6697 or 3151. FOR SALE, MINI-MOBILE, 16cwt. capacity, New, by Butters.—Write Box P.4526, "The Contract

Ready Mixed Concrete

TRUCK MIXERS and AGITATORS FOR SALE STANDARDISATION OF FLEET

We have a number of various types and capacities for immediate sale — all clean and in working condition. Prices of complete units from £1,200.

Please write:

General Transport Manager, Ready Mixed Concrete Limited, 2-3 The Sanctuary, London, S.W.I

4/3 MIXERS 'Half-Bag' FOR HIRE

30/- PER WEEK

PETROL OR ELECTRIC — I PHASE IOHN MACNAMARA & CO. LTD., Bush Rd., Deptford London, S.E.B. Bermondsey 3275-1435



MODERN CONTRACTORS' PLANT

Now available for SHORT- or LONG-TERM HIRE. Also Non-Mechanical Plant. All inquiries promptly attended to.

PLANT FOR SALE-SURPLUS TO OUR REQUIREMENTS:

REQUIREMENTS:

Double Drum WINCH for D6 Tractor.

10RB SKIMMER BUCKET.

Several Drayton 15cwt. DUMPERS.

One Stothert and Pitt 10/7 MIXER.

One Winget 10/7 MIXER.

One Winget 5/312 MIXER.

Two Winget 7/5 MIXERS.

One Mobile Twin Swing BATCHER.

Several 10RB EXCAVATORS, with any Equip.

Several 4in. DIAPHRAGM PUMPS.

Several 3cwt. and 7cwt. Ace HOISTS.

Two SITE CARAVANS.

12-ton Aveling-Barford ROLLER.

Aveling-Barford ROLLER.

RONALD LYON (PLANT HIRE) LTD.,

Laundry Road, Fulham, London, Telephone: Fulham 0712.

HENRY BOOT PLANT

OFFER FOR SALE:
ALLIS-CHALMERS HD4, Cab, 114yd. Bucket ALLIS-CHALMERS HD4, Cab, 114yd. 52,750
JOHN DEERE 831 LOADER and 51 Backhoe
J.C.B. HYDRA-DIGGA/LOADALL and Dozer
Blade
FERGUSON TE35, with Loader and Dozer
Blade
MISCELLANEOUS BUCKETS for J.C.B., Dinkum
Digger and Shawnee South from:
HENRY BOOT AND SONS (PLANT). LTD.,
Dronfield. Sheffield. Tel.: Dronfield 3206.
Also at Atlantic St., Broadheath, Altrincham.
Tel.: Altrincham 1701





The PLANT DIVISION of SOUTH HANTS HARVESTING CO. LTD.

OFFER THE FOLLOWING:

NEW J.C.B. 4 EXCAVATOR £2,780
April, 1961, J.C.B. 4, full specification
machine
June, 1960, J.C.B. 4, full specification
machine
Jan., 1960, J.C.B. HYDRA-DIGGA LOADALL,
machine
Jan., 1960, J.C.B. HYDRA-DIGGA LOADALL,
machine
machine duty front tyres, full specification
machine duty front tyres, full specification All above without Bucket, but wide choice available.

available.

1957 COUNTY BULLDOZER, with Hydraulic Scraper Take-off, BROUGHTON WINCH available for Ford County or Major.

1961 COUNTY CO 50. Very little used. Cost approx. \$2,500. Offers. MulR-HILL DUMPER, Petrol/T.V.O., 2yd. In good order and ready for work. Petrol 4,5, \$93; Diesel \$1517E MIXERS, Petrol 4,5, \$93; Diesel \$1517E MIXERS, Petrol \$15,500 MIXERS, DIESER \$155 Fast-towing SPRUNG TRAILER for above \$25

WIDE LANE, SWAYTHLING. Telephone: Southampton 56201-2-3.

HIRE SALES AND 7-DAY SERVICE FACILITIES.



When working in the West Country REMEMBER

NGE for GRAN

MODERN MACHINES WITH SKILLED OPERATORS LIFTS TO 12 TONS - IIBS TO 70 FEET

GRANGE PLANT LTD. HONITON - DEVON

Telephone: Broadhembury 330-355

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

TOR IMMEDIATE HIRE.
Delmag Diesel PILE HAMMERS, DS, D12 and
G177.
Elmag PILE FRAME, with Turntable.
Zenith PILE EXTRACTORS. Nos. 20 and 80.
McKlernan-Terry PILING HAMMERS, S, 6, 7 and
88.
Sykes No. 734 and No. 8 Double Drum PILING

983.
Sykes No. 734 and No. 8 Double Drum PILING
WINCHES.
STEEL SHEET PILES, Sections 1, 2 and 3. Various with Dragline and 70ft. Crane Equipment.
EXCAVATORS, with Dragline or Skim

Equipments.
MOBILE CRANES, Jibs up to 50ft., pneumatics KL44

Equipments.

Requipments.

Neals NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-torker.

NM 2-

Phone 2590/2690.

ROAD ROLLERS.—Aveling-Barford GD 8/10-ton, with Price Scarifier, fluid flywheel, power steering: Footpath 50/60cwt. diesels: all have Ruston engines. Marshall RD 8/10-ton, with Gardner 3-cyl. Diesel engine, Allen Scarifier, etc. — A. M. COLE. Eastgate, Sleaford, Lincs. Tel. 463.

FOR SALE, 14/10 Rex Cleanline Closed Drum ConcRETE MIXERS, complete with Built-in Weighers and Draglines, in very good condition. W. V. DAVIES, Concrete Mixer Service, Shipston-on-Stour. Phone 125.

FOR HIRE IN THE MIDLANDS: 10-ton Lorry-FOR HIRE IN THE MIDLANDS: 10-ton Lorry-mounted CRANES, Jibs to 75ft.—L. NELSON ADD CO., I TD. Lugtout Lane, Solihuli, Warwickshire. Telephone: Sheldon 4005.

POR SALE, 3 cu. vd. Horizontal Rapier TRUCK MIXER on Foden chassis. — WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

SALE, 19RB, with choice of equipments G. PLANT (SALES AGENCY), LTD., Watling on. Watlington 44.

WANTED, J.C.B. or DINKUM DIGGER, any condi-tion. State age and price.—JACOB, Ringstead. Telephone: Holme 262.

WANTED

to purchase urgently for export, Lima 1201 excavators. Best possible price offered. Condition immaterial.

Write giving fullest details to :
Box No. V.V.520, "The Contract Journal"

EQUIPMENT SALES & HIRE CO. LTD.

FOR HIRE

TRAXCAVATORS 955
FITTED SIDE TIP & RIPPER

CAT. D.7.'s Dozer or Scraper 19 R.B.'s - Any Equipment

HOUNSLOW 8831

CONTRACTORS' PLANT FOR HIRE. New Motorised PAYSCRAPERS for Immediate New Motorised PAYSCRAPERS for Immediate HIRE (22 cu. vd.).

Stids Shovels.

This Tractory, fitted with Drott Skid Shovels.

This Tractory, fitted with Drott Stids Shovels.

The Tractory, fitted with Drott Stids Shovels.

The Tractory, fitted with Euligraders and/or Scrapers.

Total TRACTORS, with Pipe-laying Equipment.

Tores Tractory, with Pipe-laying Equipment.

Tores Tractory, with Pipe-laying Equipments.

First-class machines and operators, backed by finest field service in Great Britain.

Generous tractory, fitted the Tractory, fitted field service in Great Britain.

Generous tractory, fitted field service in Great Britain.

Generous tractory, fitted field service in Great Britain.

Stratford-on-Avon 4242, Ashford (Middx.) 4191, Cardiff 33572.

FOR S A L E. Cardiff 33572 (Midox.) 4191, Car

4 Queen Street, Carmarthen. Tel. 7781.

WORKING in the Lancs, and Cheshire area?
Woolenden's are your MoBILE CRANE people,
Light or heavy Lorain, Michigan, Quick-Way, Neals,
Lifts up to 30 tons. Boom lengths to 150ft.

Anfield, Liverpool, 4. Tel.: Stoneycroft 3755/9087.

FOR COMPRESSOR HIRE SERVICE.
From 1-Tool to 12-Tool (70 c.f.m. to 625 c.f.m.
f.a.d.), Lorry-mounted and Portable. Full range of Pneumatic Tools.—Hubert C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161
(S lines).

DUY OR SELL THROUGH UNICORN.—All Mining,
Quarrying, Contractors' Plant, Ancillaries, etc.
Our Register will produce what you want.—Send your
Inquiries or details of equipment for disposal to
UNICORN PLANT REGISTER, Box, Wilts. Tel.: Bath
80053.

B8053.

VOBILE CRANES for SALE, HIRE and SPARES:
Coles, Ransomes, Morris, etc.—ROBERT DIXON,
LTD., Authorised Coles Repairers, Hunedon, Herts.
Tel.: Stanstead Abbots 301/3.

PLANT HIRE: Earthmoving, Site Clearance.
Excavations for Roads, etc.
Tunbridge Wells. Telephone: Sutthborough 1538.

Tunbridge Weils. Telephone: Southernoon.

FOR SALE. 2T Series Caterpillar D4 TRACTOR complete with Angledozer, Winch and & cu. vd. Scraper, £975. Inspection welcome. — For further details, write Box P.4642, "The Contract Journal."

FOR SALE, 3-ton Hand DERRICK, 55ft. Jib, by
Butters. — Write Box P.4525, "The Contract
Journal."

CONCRETE MIXERS FOR SALE OR MIRE.

5/31s. Winget. Benford. Parker. Maximizan.
Goodwin, Wall-Ace, and Stothert and Pitt.
diesel and electric driven, from £40 each.
7/5 Benford. Winget, Parker, and Stothert and Pitt.
hopper loaded.
10/7 Parker. Winget. Ransomes and Rapier, Rex. and
11/10 Rex. Ransomes and Rapier, and Stothert and Pitt.
14/10 Rex. Ransomes and Rapier, and Stothert and Pitt.
Large stocks of Spares for above machines.
Choice of 100 machines.

Concrete Mixer Service.
Shipston-on-Stour. Telephone 125.

Shipston-on-Stour. Telephone 125.

MASSEY-FERGUSON INDUSTRIAL DISTRIBUTORS.
FOR SALE:
Massey-Ferguson 702/710 Tractor
Choice of three, 127/710 Tractor order throughout.
Chaseside Fordson LOADER. T.V.O., good runner,
Suitable for spares, £50 or offer.
DINKUM-DIGGER, Fordson Mk. 4, completely reconditioned, new tyres. Can be seen working.

CONDITIONED, NEW TYPES. Can be seen Working.

COLLEGE MOTORS,
Ashton, Gate, Bristol, 3.

Grams: "Colmotrac." Tel.: Bristol 662266 (3 lines).

TOR SALE OR HIRE.
5/3/2 Diesel and Petrol MIXERS. Various makes
second-hand and Petrol MIXERS. Various makes
wingets.
Wingets.
Wingets.
Wingets.
Wingets.
For Dalli HAND SCRAPERS, electric and petrol.
Broads BRICK-HANDLING EQUIPMENT.
BRISTON DUMPER, £175.
Stothert and Pitt 6/3,evet. Vibrating ROLLERS, £180,
£215 and £265.

KINGSBURY PLANT.

KINGSBURY PLANT CO., LTD., Barnsley Road, Doncaster. Tel. 65242 (7 lines).

Barnsley Road, Doncaster. Tel. 65242 (7 lines).

DELMAG Diesel PILE HAMMERS for HIRE;
Models DS, D12, D22, available with Rosesuspended Leaders and leg guides; suitable for driving
any section of piles. Also G17T Delmag PILE FRAME,
with Turntable and Diesel Winch.

DUDLEY VALE, LTD.,

9 Palace Street, London, S.W.1. Tel.: VICtoria 0252.

RANSOMES AND RAPIER 410 EXCAVATOR, title with Perkins P4 Diesel Engine, Skimmer as Backacter Equipment. In good working order, £530. L. W. VASS, LTD. Ampthill, Bedford. Telephone. Ampthill 3255.

Ampthill 3255.

POR HIRE, J.C.B. DIGGERS. — F. PUDDEPHAIT
DANNO, O., Russell View, London Road, Wendere
Wendover near Aylesbury Bucks. 76.
Wendover 3164 and Aylesbury 2902.

WANTED. Wallis and Steevens small 30cet.
ROLLER, petrol or diesel: Drott SHOVEL and
two Aveling 41-yd. DUMPERS also required.
Write Box P.4646, "The Contract Journal."

FOR HIRE

All Contractors' Plant

SLOGGETTS (ENGINEERING) HAMPTON HILL, MIDDX. Teddington Lock 1138/9

HUBERT C. LEACH LTD. OFFER -EX STOCK KELVIN ROAD FORMS

FOR SALE OR FOR HIRE

Write for Details:

HUBERT C. LEACH LIMITED

HIGH STREET, CHESHUNT Telephone: WALTHAM CROSS 25161

Rollers 21-10 Ton Barber-Greene and Blaw Knox **Finishers**

Bristol Duplex Mobile Compressors General Contractors' Plant

HAULAGE BY OUR OWN LOW LOADER CAN BE ARRANGED AT COMPETITIVE PRICES

WILLIAM F. REES LTD.

MARLPIT LANE, COULSDON, SURREY Telephone: Uplands 5302 & 9434





CRANE HIRE &TRANSPORT DIVISION.

I · MARYBONE · LIVERPOOL

Pitt. and and

nner, re-king.

180,

15).

Rope-riving AME,

0252

£550

HATT dover Tel.:

Ocwt.

1)

1/9

'n.

S

RE

D

61

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

Tork SALE AND HIRE.

11-In., 2in. and 3in. Centrifugal PUMPS, petrol and diesel driven.

2in. and 3in. Lift and Force PUMPS, petrol and diesel driven.

2in. and 3in. Lift and Force PUMPS, petrol and diesel driven.

10cwt. 15cwt., 20cwt. and 30cwt. Diesel-driven DUMPERS.

G.F., Benformore HOIST, diesel driven.

Wickham Commade COMPRESSOR, with Lister diesel and commade COMPRESSOR, with Ruston diesel cengine, on 2-wheeled trailer chassis.

Strong, Portable WORKBENCHES.

Ferguson Diesel TRACTOR.

Low-wheelbase LAND-ROVER, good condition, taxed to December.

n Diesel TRACTOR.
eelbase LAND-ROVER, good conditio
December.
SOUTH MIDLANDS ENGINEERS,
Shipston-on-Stour. Telephone 3212.

Shipston-on-Stour. Telephone 3212.

MANTED, WANTED, WANTED,
MEANT EARTHMOVING MACHINES and EQUIPMENT of all types. Modern machines preferred, others
considered, immediate inspection; spot cash settlement,
write, giving full details and location, to A.R.C.
MOTOR CO., LTO., Redhill Works, Arnold, Nottingham.
Telephone: Nottingham 263331/5.

Telephone: Nottingham 263331/5.

TOR HIRE.—Contractor has S4RB EXCAVATOR, with Dragline or Face Shovel Equipment, available for immediate hire. This machine is in excellent condition, and reasonable hire rates quoted.—Apply R. G. HORTON, LTD., Delph Road, Brierley Hill, Staffs. Phone 77722.

Staffs. Phone 7/722.

FOR SALE, 1953 Priestman Wolf, No. 6556, Back-acter, with two Buckets, 2ft. 6in. and 1ft. 9in. Fracks and engine recently reconditioned. Nearest older £650. — ERNEST DOE AND SONS, LTD., Therapla Lane, Mitcham Road, Croydon. Telephone: Thornton Heath 4644 and 4095.

POR SALE, surplus to requirements, Euclid SCRAPER, Model TS24, powered by Cummings Diesels, new 1959. Excellent working order.—For further particulars apply MARTIN COWLEY, LTD., Clay Cross, Derbyshire. Telephone: Clay Cross 2501.

TOR SALE, Laycock 60-ton Hydraulic Garage of Works PRESS, £125. Photograph on request NORMAN WALKER (MACHINERY), LTD., Anlaby

WANTED, New or Second-hand DINKUM DIGGER.
Write Box P.4604, "The Contract Journal."

LOADER SALES

& HIRE LIMITED

Offer the following Loading Shevels at competitive prices:—

1959
Weatherill 2HCRQ, Fordson Diesel
Engine. Cab. 1 cu. yd. Scoop. Good
tyres, rears 1400 x 24. Price ex works

Bray BL30, Fordson Diesel Engine. Cab. 1 cu. yd. Scoop. Good tyres 1400 x 24. Price ex works£1,075

1958
Bray BL35, Fordson Diesel Engine.
1 cu. yd. Scoop. Cab. Sound tyres.
Clean machine. Ready for work. Price

1957
Chaseside Hopto Excavator, with Face
Shovel and Backhoe Scoops, selfcontained 4-cyl. Diesel Engine. Allweather Cab, hydraulic controls.
Mounted on Bedford chassis. As
standing. Inspection invited. Price £495

Telephone: Ware 2398

Star Street, Ware, Herts.

WANTED FOR OVERSEAS CONTRACT:
One Lima 1201 EXCAVATOR.
One Lima 2001 EXCAVATOR.
One Lima 2010 EXCAVATOR.
One Lima 802 EXCAVATOR.
Four 22RB or 19RB EXCAVATORS.
Two 43RB EXCAVATORS.
Six Caterbillar Des.
Other Control of Co

P OR SALE, 33RB 14500 Series DRAGLINE EXCAVATOR. Shovel Equipment available. PLANT SALES, LTD., 25 Castlereagh Street, London, W.1. Telephone: Paddington 2663/5.

FOR SALE. 3-ton LIGHT MONOTOWER, 75ft. Jib, new. Butters make. — Write Box P.4522, "The Contract Journal."

KINGSTON PLANT HANWORTH . MIDDX.

FOR SCRAPERS AND ALL PLANT HIRE FELTHAM 4084

EALING 4754 ARUPS

EALING 4754 ARUPS EALING 4754 ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754
ARUPS EALING 4754 EALING 4754 ARUPS EALING ATUPS CRANE ATUPS EALING ARUPS EALING 4754 ARUPS EALING 4754 ARUPS
EALING 4754 ARUPS
EALING 4754 ARUPS
EALING 4754 ARUPS
EALING 4754 ARUPS
EALING

EALING 4754

ARUP & ARUP LTD., 54/59 UXBRIDGE RD., LONDON, W.5

F 1957 CHASESIDE 500, excellent order, new tyres
1950 rear wheels. One owner, 5950.
1950 rear wheels. One owner, 5950 rear wheels. One owner, 5950 rear wheels of the compound
1958 Muir-Hill LÖADING SHÖVEL, cable operated.
Good running order. £45.
MOBILE OFFICE, three large compartments, sink unit, cupboards, mounted on eight-wheel trailer.
3388 EXCAVATOR, complete with Dragline Equipment. £3,250.
25-ton Scammell and 20ft. well Carrimore LOW LOADING TRAILER. £2,250.
10-ton 16ft. well seed to the compartment of the compartment

WANTED, modern 10RB, or equal, with equipments HODGSON, Springfield House, Fleetwood.

WORKING IN WEST SUSSEX ? ? ?

Your INQUIRIES for the HIRE of all TYPES of PLANT are invited and will be specially and premptly dealt with on application to:

NEALS (PLANT HIRE), LTD., Stockbridge Road, Chichester, Sussen, Telephone: Chichester 3777/8/9.

BROWNS

MASSEY-FERGUSON Tractor-Digger-Shovel



An outstanding machine with a BIG WORK output. Withits rugged construction, great manoeuvrability and LOW PRICE it's the BEST BUY in its class.

For Details and Demonstrations Contact: Browns Industrial Equipment Ltd. LEIGHTON BUZZARD, BEDS. Phone 2062 (4 lines)



TAS/LS1

MOBILE & PORTABLE AIR COMPRESSORS PHEUMATIC TOOLS DERRICKS BUMPERS ETC.

COVENTRY COMPRESSORS LTD

Stewarts Road, Battersea, S.W.8 · Tel: Macaulay 7231 (3 lines)

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

LLIOTT BROS. (WORTLEY). LTD.
N.C.K. 304. Backacter. Thornvcroft NR6 Engine.
former property of Corporation, £2,600.
Ruston 21. *Ayd. Dragline or Face Shovel. Choice
of three, from £1,200.
10RB, any equipment, VRON 3-cylinder, hand start,
£600. 10RB, any equipment, VRON 3-cylinder, electric start, £650. 10RB, any equipment, VRON 3-cylinder, electric start, £650.

Ransomes and Rapler 423, rigged as crane, 45ft, Jib (Crowd Shovel available), £750.

Ransomes and Rapler 410, Dragline, F/S, Backacter and Skimmer, Ford 4D engine (electric start), Smith 5/20 Crane, Gardner Engine.

Smith 5/20 Crane, Gardner Engine.

Converted excavator. £1,100.

Jones Super 40, 3-ton Crane, £650.

Sinth £7/10's, any equipment. Choice of six, £200-Catexillar D6, 3-cylinder Cable Angledozer, £600.

Flat 55L, Angledozer and Winch, £600.

Muledozer, Fordson 4D, Hydraulic, Cab, Lights, etc., £300.

£500.

Caterpillar D6, 3-cylinder Cable Angledozer, £600.

Flat \$51. Angledozer and Winch, £600.

Lights, etc., £600.

2010. x 1210. Baxter Crusher, needs bearings, £150.

Reconditioned at £250.

Heavy-duty \$5 creen to suit above, 8ft. x 4ft., with 1.5500.

Bedford-Perkins 10-ton Low Loader, £450.

Two 1vd. and 11-yd. Self-dumping Grabs, £200 each. Meadows Diesel Engine, 6-cylinder. Seen running, £100.

Leviand Diesel Engine, 6-cylinder. Seen running, £100.

L4/10 Blaw Knox Diesel High-discharge Mixer, £100.

12/10. x 8in. Girders, 15 tons, at £26.

Explored to the first of the first

FOR SALE, 19RB EXCAVATORS, two available.

Dragline or Skimmer Equipments. Excellent

DUDLEY VALE, LTD.,
9 Palace Street, London, S.W.1. VICtoria 0252.

FOR SALE, 5-ton DERRICK CRANE, hand or compressed air operated, 50ft, lib, independent slewing gear, £650. — Apply PENGWEN AND GWYDYR QUARRIES, LTD., Pant-y-Carw Quarry, Llanrwst, Denbighshire. Tel.: Llanrwst 571/2.

FOR SALE, 14/10 Stothert and Pitt High Discharge CONCRETE MIXER, complete with Weigher and Dragline, in very good condition.—W. V. DAVIES. Concrete Mixer Service, Shipston-on-Stour, Tel. 125.

P L A N T F O R S A L E.

Seven Stothert and Pitt 7/5 MIXERS, with 5/1
Lister Diesel Engines. Extremely clean machines.
One Sykes 4in. WATER PUMP. with Russon 2VSH
25/30cMt. FOOTPATH ROLLER, by Dixon Hawksterm of the Sylventh Russon 2VSH
25/30cMt. FOOTPATH ROLLER, by Dixon Hawksmachine, Sprinklers, etc., £225.
Two C.P.T. MOBILE COMPRESSORS, with Russon
4VRHC and 3VSH Engines, 105 c.f.m. and 210
c.f.m., £150 and £265.
Chaeside 1yd. Rope SHOVEL, P6 Diesel, 1200 x 24
twin rears, 1951 machine, in 100 per cent. workPlatypus CRAWLER, OOZER, Perkins P4 Diesel Engine,
Complete with cab, good working order, £295.
Two 15cmt. MOBILE HOISTS, by British Hoist and
Crane Co., Petter AVA1 Diesel Engine. Reconditioned. £75 each.

Three 12yd. LP SCRAPERS, first-class condition, £725.

Aveling-Barlord 4-ton Diesel LA ROAD ROLLER, ex Ministry, very good condition, £525.

On Ministry, Cheap to clear.

Six 1yd, G.F. Diesel Side and Front Tipping DUMPERS. From £75.

One D4 Caterpillar ANGLEDOZER, 1951 machine, complete with Winch, etc., in 1956 condition. 4-wheeled MoBILE SITE OFFICES, some complete with drawing laste, etc. Would be a credit to Bristol 22 DOZER, reconditioned P3 Englise, Machine completely overhauled, track and blade in very good condition.

Bristol 22 DOZER, reconditions:

completely overhauled, track and blade in very
good condition.

Aveiling-Barford Engine, interchangeable grass
rollers, water sprinklers. Condition outstanding.

G. H. DUNNING,

Ballards Yard, High Street, Edgware. Edgware 2572.

Open week-ends.

Part of the state
STIMPSON AND ROLLSTON, LTD., West Avenue, Wigston, Leics. Tel.: Wigston 2261 WEST AVERIUE, WIGSTON, LEICS. Tel.: Wigston 2261.

C ONTRACTORS: PLANT FOR HIRE.

EXCAVATORS. TRAXCAVATORS, BULLDOZERS,
rton Diesel ROLLER, MONORAIL TRANSPORTER
EQUIPMENT, VIBRATORY ROLLERS, COMPRESSORS,
MXERS, PUMPS, etc.—Plant Dept., WM. TOWNSON
AND SONS, LTD., Higher Swan Lane, Bolton. Tel.
Bolton 62121.

FOR SALE, 1960 BTD6, Drott 4-in-1 Shovel, excellent condition.—A. J. WARD AND SONS, LTD., Staines 54111.

LORRY-MOUNTED COMPRESSORS for SALE, 2-tool,
Broomwade Diesels.—ROADS AND RUNWAYS,
Tel.: Abbey 4905 or Bridgend 4163.

DROTT SHOVELS 4-IN-I DINKUM DIGGER MAJORS **BRISTOL DIGLOADERS** MUIRHILL 3 YD. DUMPERS EARTH BORING MACHINES PRIESTMAN EXCAVATORS VIBRATING ROLLERS

HIRE FROM ACWORTH (PLANT HIRE) LTD.

207 HIGH STREET, WALTHAM CROSS WALTHAM CROSS 26211

SELECTED STOCK ITEMS.

1958 Drott 4-in-1 SKID-SHOVEL, recent track overhaul. £2,400 No. 11419, fitted Trencher, 1018 St.
Chandler's Ford, Hants. Telephone: 2981.

D9, D8, TD18 and TD14 BULLDOZERS and Scrapers, Motor Graders, Excavators and new Tippers for HIRE or SUB-CONTRACT WORK. Particular attention given to finish and compaction. New and modern machines in first-class condition. Good operators. Technical staff available to analyse, programme and price complex projects.

Broadview Firm, Blacknest, Alton, Hants. Telephone: Bentley 3241.

Telephone: Bentley 3241.

SECOND-HAND PLANT FOR SALE.

1958 and 1959 Drotts 4-in-1.

Several MOBILE CRANES.

10-ton Lorry-mounted Lorain CRANE.

DUMPERS and MIXERS.

For place and location ring: Valentine 9596/7.

NEW WANSTEAD AGENCY,

96 Crambrook Road, liftord, Essex.

FOR SALE, 1953 Priestman PANTHER, with 1278.

Crowd Shovel, Dorman electric start Diesel Engla.

All in very good order and ready for work. Price 51,100, or nearest offer.—HOLLAND PLANT, LTD.,

Otley, Yorks. Telephone: 2940.

FOR SALE, 1988 EXCAVATOR, with Backacter
Equipment, Diesel Englare (elec. start).—William

FOR SALE, 19RB EXCAVATOR, with Backacter Equipment, Diesel Engine (elec. start).—WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 619081 (10 lines).

ALL TYPES OF BUILDERS' CONTRACTORS' PLANT

FOR HIRE

SYMES (PLANT) LTD.

ONGAR ROAD. BRENTWOOD, ESSEX.

TEL. BRENTWOOD 2116 (5 lines)

FOR HIRE

SIDEBOOM TRACTORS

TRACTORS: HD7, HD10, HD14, Dozer or Scrapers. D4, D6, D8, Dozer or Scrapers.

TRACTO-SHOVELS: HDSG, with 114 cu. yd. Bucket. HD9G, with 214 cu. yd. Bucket.

HD9G, With 2-4 CE, PARCE CAVATORS: 10RB, 19RB, all equipments. J.C.B. Hydra-Diggs, all equipments. DUMPERS: Aveling: 412 cu. yd. Rob Roy, 15cwt.

ROLLERS: S-ton and 8-ton, Diesel. CRANES: 5-ton and 10-ton, lorry-mounted 30-60ft. Jibs.

PUMPS: 3in. L. and F. Diaphragm. 3in. Centrifugal.

MIXERS: 5/312, 7/5, 10/7, 14/10.
TIPPING LORRIES:
Austin 6 x 4.

All inquiries to:

G. CARTER & SONS, LTD.

YOKESFORD HILL, ROMSEY, HAN Telephone: Braishfield 395/6/7.

hire your plant from CAMBRIDGE

Prompt Delivery

146 HILLS ROAD

Cambridge

TELEPHONE 47296-7

MODERN DIESEL ROLLERS AND DIESEL COMPRESSORS EXCAVATORS AND BULLDOZERS DUMPERS, MIXERS, PUMPS, ETC.



PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:
MISCELLANEOUS:
BENFORD '2-ton DIESEL DUMPERS, 1958, good working of 2.15 E.
LOW-LOADING F. 15 E.
LOW-LOADING TO 15-ton, ex Ministry. Also
TRALER MOUNTED TANKS, 250, 500, 750

LOW-LOADING I MAILEN, 15-ton, ex Ministry, Also ton, 10/12-ton, 15-ton, ex Ministry, Also ton, 10/12-ton, 15-ton, ex Ministry, Also ton, 10/12-ton, 15-ton, ex Ministry, Also ton, 15-ton, 15-ton, ex Ministry, Also ton, 15-ton, 15-ton, ex Ministry, Also ton, ex Ministry, and ex Ministry, ex Ministry, and ex Ministry, ex Ministry, and ex Ministry, and ex Ministry, and ex Ministry, ex Ministr

ATLS 2-tool DIESEL PORTABLE COMPRESSORS,
Dorman Diesels, on pneumatics, good condition,
225 each.
AIR PUMPS 2/3-tool COMPRESSORS, Lister Diesel
Engine, on 2- or 4-wheel trailer or lorry chassis,
as Ministry, unused, £490 to £560 each.ER,
perkins Diesel, Sprinklers, 1952, good condition, Perkins Dieser, Sprinklers, Cab and AVELING 6/8-ton GC ROLLER, Sprinklers, Cab and Scarifer Perkins Diesels £1,800 Perkins Perkins Diesels £1,800 Perkins Perkins £1,800 Perkins Perkins £1,800 Perkins Perkins £1,800
PARKÉR NO. 3 KUBIT BREAKER, 6-hammer machine, no motor, £795.

MARSDEN 30in. x 17in. Type H DOUBLE TOGGLE ROLLER-BEARING GRANULATOR, £1,750.

BROADBENT 36 x 24 CRUSHER, with motor and starter, £2,450 MOND CONE CRUSHER, 1949.

CATERICLAR DE 2011.

CATERICLAR DE

cu, yd., G.M. Engines, good condition. Price on application 12 cu. yd. L.P. SCRAPERS, very good order. 5925. each. TRACTOR. La Plant Choate Robert Caterification of the control of the co 955 CATERPILLAR TRAXCAVATOR, 1957, Side-tip, very good condition. Price on application, 977 CATERPILLAR TRAXCAVATOR, 1957/58, good condition. \$5,500.

ALLIS-CHALMERS HD10 TRACTOR. Cabledozer and Winch, good working order. £900.

BARBER-GREENE BOA MIXALL, on pneumatics, Armstrong Diesel, November, 1955, good condi-

BARBER-GREENE
Armstrong Diesel, November, 1955, good consultion, 5950.

APPLEBY-FRODINGHAM PILING No. 3, 35/50ft.
Inception, 1950.

APPLEBY-FRODINGHAM PILING No. 3, 35/50ft.
Inception, 1950.

APPLEBY-FRODINGHAM PILING No. 3, 35/50ft.
Inception, 1907.

APPLEBY-FRODINGHAM PILING No. 3, 35/50ft.

APPLEBY-FRODINGHAM PILINGHAM PI

Feeders, £875 each.
FOR A COMPREHENSIVE LIST OF PLANT FOR SALE AND HIRE—SEND FOR VALES FREE PLANT Further details: 14 Lower Grosvenor Place, London, SW1. Victoria 7531, 3501, 8080, 9886 (15 lines).

TO R S A L E. TUDE STEAM BOILER, Salt Flie Driver, C. 100lb. pressure.

One Fetter 11-In.D. Twin Diesel Water-cooled 110-V A.C. 57-Amp. LIGHTING SET, as new.

One Heavy 3ft. Inserted Teeth CIRCULAR SAW-BENCH.

90 Chesterton Lane, Cirencester 801.

FOR SALE by civil engineering contractor, Modern SARB EXCAVATOR, with Dragline Equipment. This machine is in very good condition.—Write Box P.4426, "The Contract Journal."

L 18tt. well bed.—DOUGLAS-HAMILTON, LTD., Tunbridge Wells. Telephone: Southborough 1538/9. FOR SALE, Aliam VIBRATORS. — B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon.

FOR SALE, 5-ton Lorry-mounted CRANE.
WILLIAM G. SEARCH, LTD.,
Whitehall Road, Leeds, 12. Tel. 639081 (10 lines). FOR SALE, 3-ton Electric DERRICK, 95ft. lib, by Butters. — Write Box P.4524, "The Contract

JOHN DEERE 1 cu. yd. CRAWLER LOADERS Javallable, LONG or SHORT HIRE. Keen rates. RINGWAY CONTRACTORS. LTD., Horstorth 4805. OR SALE, Ransomes-Rapier 2127d. TRUCK MIXERS.—B.G. PLANT (SALES AGENCY), LTD., itlington, Oxon. Watlington 44.

BIG CRANE EXCAVATORS

A.R.C. MOTOR Co. Ltd. RIDHILL WORKS, ARNOLD, NOTTINGHAM Telephone : 26-3331/8 NEAGRON (CONSTRUCTION), LTD.
OFFER FOR SALE:
CATERPILLAR Mode 1955 1 1270 Tractor SHOVEL,
Machine No. 1250 1 1270 Tractor SHOVEL,
New 1956. 25.30.
RISTOWE 250-gailon No. 12 Lorry-mounted Power
Operated EMULSION SPRAYER, Spraybar, Tank.
New 1954.
LAW KNOX BATCHING PLANT, two 20-ton 3-bin
Batchmasters, 30-ton Silos, 21/14 Mixers. New
1959.

Batchmasters, 30-ton Silos, 21/14 Mixers. New 1959.

ATLAS Model NT9MV 2-tool Portable COMPRESSORS, Ford Diesel Engines, fast towing Chassis. New 1958.

C.P. C.P. C.P. C.P. C.P. C.P. Stationary COMPRESSOR, etc. 1958.

NEALS Model QM 4/6-ton MOBILE CRANE, 35ft. Lattice Jib, Ruston 3VSM Diesel Engine, pneumatic tyres. New 1955.

54RB 212yd. EXCAVATOR, rigged as a crane, 80ft. 11b, Ruston Diesel Engine. New 1957.

BUTTON MODELS CONTINUED TO STANE, 120ft. Jib, Thompson Continued CRANE, Mk. VII, Series 7, 30ft. Jib, Thompson CRANE, Mk. VII, Series 7, 30ft. Jib, Thompson Chassis. New 1943.

RUSTON-BUCYRUS 22-ton Transit Lorry-mounted CRANE, 70ft. Jib, Floornoof Chassis. New 1943.

RUSTON-BUCYRUS 22-ton Transit Lorry-mounted CRANE, 70ft. Jib, Floornoof Chassis. New 1943.

PINGON P13 3-ton Rail-mounted TOWER CRANE, 66ft. Saddle Jib. New 1958. RECORD Model 405 TOWER CRANE, 72ft. Saddle Jib. New 1959. 10RB ³ayd. EXCAVATOR, Skimmer and Backacter Equipment, Ruston 3VROHN Diesel Engine.

Equipment, Ruston 3VROHN Diesel Engine. Rebuilt New 1950.
30RB 1yd. EXCAVATOR. Backacter Equipment, air controls, Ruston 5YFN Diesel Engine. New 1959.
54RB 2'2yd. EXCAVATOR. Face Shovel or 80ff. Dragline Equipment, Paxman GRPHN Diesel Engine. New 1958.
LIM Engine. New 1958.
LIM Engine. New 1958.
LIM Engine. New 1958.
LIM Engine. New 1958.
BLAW KNOX 10/7 Cleanline MIXER, Integral Weighgear, Loading Shovel. Rebuilt. New 1958.
BENFORD 18/12 Reversing Drum MIXERS, Weighgear 300 land Scrapers, Petter Diesel Engines. New 300 land Scrapers, Petter Diesel Engines. New

and Hand Scrapers, Petter Diesel High Discharge
1960.
STOTHERT AND PITT 21/14 MIXERS, High Discharge
Frames, Weighger and Loading Shovels, Petter
Diesel Engines, New 1957.
RANSOMES AND RAPIER 3vd. CONCRETE AGITATORS, Albion Chieftain Chassis. New 1959.
1,000ft. 4in. and 6in. Grooved VICTUALIC TUBING,
25ft. lengths.
Several thousand FLOOR FORMS 2ft. x 2ft.-3ft. x 2ft.
x 1in.

ACROW No. 2 FLOOR CENTRES, first-class condition.
ALDRIDGE AND RANKEN SCREEN, 48ft. long,
31-jan, to 61-jan, perforations, 90 tons per hour,
electrically operated.
PORTASILO 20-ton CEMENT CONTAINERS, 336ib.,
Weigh Hoppers and Aerators, New 1959.
UMBO 20-ton CEMENT CONTAINER, 250ib. or
350b.
A.C.E. Memory 1953.

A.C.E. Comet MOBILE HOIST, Petter New 1953.
ROAD MACHINES MONORAIL EQUIPMENT—Power Wagons, Skips, Rails, Overhauled, New 1956.
PUMPCRET PC3 6in. CONCRETE FUMP, Re-mix Hopper, Rectrically powered, SOOt. pipeline. Hopper, electrically powered, 500ft, pipeline. New 1960. AVELING-BARFORD MAINTENANCE GRADER, Rear-mounted Road Brush, Ford Diesel Engine. New

mounted Road Brush, Ford Diesel Engine. New 1960.
STOTHERT AND PITT 1634cwt. Tandem VIBRATING ROLLER. New 1960.
BRISTOL Duplex Tractor SHOVEL/OVERLOADER. New 1958.
BITERNATIONAL BROOM TRACTOR, Hydraulic Angledose. Onlos-String 10/14yd. Scrapers, Onlos-St CATERPILLAR D7 4T Series TRACTOR, Hydraulic CATERPILLAR D7 4T Series TRACTOR, Birtley Bull-CATERPILLAR D7 20 Series TRACTOR, Birtley Bull-CATERPILLAR D7 20 STATE Equipment, Overhauled, New 1952.

APPLEBY-FRODINGHAM 50 tons No. 2 PILES, 20/32ft. lengths.

LARSSEN 280 tons No. 3 PILES, 381: lengths.

LARSSEN 280 tons No. 3 PILES, 381: lengths.

New KINGSLAND 112in. Diesel and Electric BAR CROPPERS available ex stock, Dagenham depot. New NEAGRON TRENCH SHEETS, 131in. wide, 6/16ft. long, 8½bl. per foot run, available ex stock, 4s. 2d. per Sq. ft. delivered.

Abbey House, Victoria Street, London, S.W.1. Telephone: ABBey 5152, Sullivan 7626 (10 lines).

FOR SALE. New and used Bristol Diesel CRAWLER TRACTORS, with Angledozers, Loading Shovels and Trench Diggers.—Demonstrations without obligation from the Main Dealers, H. A. SAUNITE, 11-2-10 The Butts. Worcaster, Telephone 2865. POR SALE, 10RB, Backacter, in working order, at Radeliffe, Lancs, Machine No. 14625.—REGAN AND ALMOND, 30 Sutton Road, Stockport. Tel.: Heaton Moor 3856.

DIESEL ROAD ROLLERS WANTED

Aveiing-Barford and Marshall 6/8-ton and 10/12-ton, with scarifiers, sprinklers, driver's cab, etc. Post-wai models preferred.—Particulars, cash price or exchanges:

A. M. COLE. Eastgate, Sleaford, Lincs. Telephone 463.

GRAYSTON PLANT AND ENGINEERING CO., LTD. From our own stock we offer for SALE the GRAYSTON PLANT AND ENGINEERING CD., LTD.
From our own stock we ofter for SALE the
following:
E.1339.—1088 EXCAVATOR, 11600 Series, with
Skimmer, overhauled, £1.175.
OP.245.—SERIES CO. ATOR, 14763 Series, with
Dragline, £2,650.
OP.234.—22RB EXCAVATOR, 22000 Series, Dragline Equipment, £4,950.
E.1322.—22RB EXCAVATOR, 15000 Series, with
Dragline and Grab, £3,500.
E.1321.—24RB EXCAVATOR, 3000 Series, with
Equipment, £1,975.
OP.240.—43RB EXCAVATOR, 5000 Series, Dragline
Equipment, £1,975.
OP.240.—43RB EXCAVATOR, 5000 Series, Dragline
Equipment, late type engine, very good condition,
£2,500.000. Equipment, 21,37.

P.240. 43RB EXCAVATOR, 5000 Series, Brewinse Equipment, late type engine, very good condition, £3,500.

E.1286.—S4RB EXCAVATOR, 22300 Series, with Carlotte experience of the condition of the

SHOVELS, spare wheels and cab. Price on application.

C.1448.—10-ton Butters 120ft. Jib Electric DERRICK CRANE, £3,950.

C.1049.—7-ton Anderson-Grice 120ft. Jib Electric DERRICK CRANE, £3,450.

C.1041.—Neals NMS 3-10n MOBILE CRANE, with 40ft.

Cantilever Jib. £2,200.

MOBILE CRANE, with 40ft.

Cantilever Jib. £2,250.

L.1631.—Pingon P15 Rail-mounted TOWER CRANE, new 1959, £2,375.

C.1031.—Pingon P16 Rail-mounted TOWER CRANE, new 1960, £3,000.

C.1002.—10-ton Steam Loco. CRANE, with 40ft.

Jib. £2,200.

R.182.—Aveling-Barlord 6-ton Tander ROLLER, Model

Tel.: Macaulay 6688 (10 lines).

OMPRESSOR BARGAINS.
2-tool Ingersoll-Rand, Type 40, Gardner 4LW Diesel with self-starter, on four pneumatics, £285; another, £245e. Piston Diesel, new 1955/2-tool Mackay-Pescara 246e. Piston Diesel, new 1955/2-tool Ingersoll-Rand Model K2lO. fitted 5LM. Gardner, Self-starter, 2-wheeled HD trailer, £685. 300 cu. ft. Electrically driven Stationary Set, 85-h.p. motor, 440/3/50, £495.

Write: 26 Melville Grove, Newcastle upon Tyne.

Write: 26 MeVille Grove, Newcastle upon Tyne.

P LANT FOR SALE.

P Stothert 10/7 Diesel MIXER, Winget 7/5 DiTTO, power loaded.

Quantity 8in. ROAD FORMS and KERB MOULDS.

Spencer-Hopwood No. 18 Oll-fired STEAM BOILER, 2,000lb. evap..

DITTO No. 10, 1,200lb. evap., 120lb. w.p., coal-fired.

Cylindrical FUEL Oil. TANKS, 4,000 gail., 2,300 gall. and 1,000 gall. A. H. KIMMINS AND SONS, LTD., Lyndhurst Road, Worthing.

WANTED. — Crawler TRACTORS, BULLDOZERS, EXCAVATORS, DIGGERS, ROAD ROLLERS, LOW-LOADERS, etc. Prompt cash and collect.—Offers to ROBIN BOSWORTH, Ludlow, Shropshire, Tel.: Stoke St. Milboro 237.

F OR S A L E.
19RB DRAGLINE EQUIPMENT, complete, £300.
Ransomes Rapier 423 FACE SHOVEL, as new, £175.
19RB Paxman ENGINE, complete, £80.
THOMAS CORNELL AND CO., LTD., STOCKport 7214. FOR SALE, 25 new Unused Frodingham 4 PILE 37/40ft. £35 per ton.

DUDLEY VALE, LTD.,
9 Palace Street, London, S.W.1. VICtoria 0252.

BUILDMASTER 55 TOWER CRANE

FOR HIRE OR SALE. New Dec., 1960. Duties: 4 tons at 37ft. 8in. radius 201ft. high, 134 tons at 98ft. 6in. radius 131ft. high.

ABELSON AND CO. (ENGINEERS), LTD., Coventry Road, Sheldon, Birmin



Most muck moved for least money spent!

DISTRIBUTED IN THE UNITED KINGDOM BY

BLACKWOOD HODGE

JOHN BLACKWOOD HODGE & CO. LTD. 25 BERKELEY SQUARE LONDON W.I.

F

SKII F

Fo Back new: View War

A rings

Fo

W

PLANT AND MACHINERY WANTED -FOR SALE-FOR HIRE

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:
CRANES:
JONES KL22 MOBILE, Diesel, pneumatics, 24ft. Jib,
good condition, £600.
NEALS 2-ton NMC, Diesel, 35ft. Jib, Crawlers, 1953,
3-ton BUTTERS ELECTRIC DERRICK, 60ft. Jib, hand
TAYLOR JUMBO 3-ton MOBILE, Diesel, excellent
condition. £1,350.
NEALS 26-ton MOBILE, 40ft. Jib, good condition,
SMITH 5-ton DIESEL MOBILE, 20ft. Jib, solids, £900.
BUTTERS 5-ton ELECTRIC DERRICK, 120ft. Jib,
good condition, with or without Bogles, £2,000/
EZ,350. PILES 5-ton SECH DESPIEK, 100ft.

BUTTERS S-ton ELECTRIC Method Bogles, £2,000/
good condition, with or without Bogles, £2,000/
£2,350.

ANDERSON-GRICE S-ton STEAM DERRICK, 100ft.
Jib. good order. £1,150.
PRIESTMAN CARIBOU LORRY-MOUNTED, 35ft. Jib.
PERKINS PO Diesel, 1957, £3,950.
COLECTRIC STEAM OF STEAM Jib, good condition. Price on application.
BUTTERS 7-ton 2-motor ELECTRIC DERRICK, 120ft.
Jib, Bogles, 1951, £3,950.
BUTTERS 10-ton Single-motor ELECTRIC DERRICK, 120ft.
Jib, £3,850.
COLES 10-ton MOBILE, 30ft. Jib, on pneumatics, BUTTERS 7-ton 2-motor ELECTRIC DERRICK, 120ft. Jib. Bogles, 1951, £5,950.

BUTTERS 10-ton Single-motor ELECTRIC DERRICK, 120ft. Jib. £3,850.

COLES 10-ton MOBILE, 30ft. Jib. on pneumatics, £3,250.

BUTTERS 10-ton OIL-FIRED STEAM DERRICK, 120ft. Jib. good working order, £3,850.

MORGAN 15-ton STEAM DERRICK, 120ft. Jib. new good order, Price on application, COLESSON BOGIES, Price on application, so good order, Price on application, etc. Steam of the price of application of the price of the p

FOR HIRE and SALE: ARMSTRONG-WHITWORTH
P N EU M A T I C POKER-TYPE CONCRETE
VIBRATORS.
We are distributors for all twims of Armstrong-whitworth Pneumatic CONTRACTORS' TOOLS, including Concrete Breakers, Light Picks, Clav Diggers, Rock Drills, Pumps, Backfill Rammers and Tampers, Hoses and Accessories. We hold a large stock of Spares and an give a 48-hour repair service. New and Secondhand Air Pumps COMPRESSORS for SALE. Send for list.

HUBERT C. LEACH, LTD., 131 High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

Herts. Tel.: Waltham Cross 25161 (5 lines).

RELIABLE MACHINES FOR SALE.
Four Thwaites 1 cu. yd. Diesel DUMPERS, 1959.
Petter PH1 overhauled, good working order
throughout. Each £225.
One International Drott 1 cu. yd. SKID-SHOVEL,
BTD6 K3, 1958, completely overhauled, November/January, 1961. Can be seen working, £1,850.
POWER PLANT HIRE (BEDDINGTON), LTD.,
Beddington Lane, Croydon, Surrey.
Tornton Heath 3402.

FOR SALE, J.C.B. 4 EXCAVATOR, with 3-in-1
equipment, Jib extension and narrow Ejector
Bucket, condition as new, and done 200 hours' work
only, and supplied new in March, 1961.
£2,650.

enly. £2,650.

E2.650.
Write Box P.4597, "The Contract Journal."

FOR SALE, One D4 Caterpillar TRACTOR, Series GU, fitted with L.P.C. Hydraulic Angledozer, reconditioned throughout. Or EXCHANGE for Drott 4-in-1 or 19RB EXCAVATOR. Cash adjustment. Write Box P.4649, "The Contract Journal."

FOR SALE, Rapier ³yd. DRAGLINE BUCKET, new 1959, fully dressed, excellent condition, £150. J. J. JOHNSTON AND CO., LTD., 271 Uxbridge Rd., London, W.12. Tel.; Shepherds Bush 6941.

FOR HIRE. Three 15/-ton Euclid REAR DUMP WAGONS.—CURRALL, LEWIS AND MARTIN, LTD., 11 Booth Street, Birmingham, 21. NOR 6531.

FOR SALE

Approx. 1,000ft: King OVERHEAD RUNWAY SYSTEM complete with 16 cu. ft. Skips.

WRITE BOX CJ852.

c/o Hanway House, Clark's Place, E.C.2.

FOR HIRE **ALL BUILDERS' PLANT**

Alloy and Steel Scaffold tube, boards, fittings, Acrow props, concrete mixers, etc.

Prompt delivery, competitive prices and terms arranged

M. SANDERS LTD.

18/20 Mediar St., London, S.E.S. ROD 5143

TOR SALE.

1955 J.C.B. DIGGER. with Front Shovel, £850.
1956 J.C.B. DIGGER and Front Loader, straight from work, £475.
1955 J.C.B. DIGGER and Front Loader, straight from work, £475.
1958 J.C.B. DIGGER and Front Loader, straight from work, £475.
1958 J.C.B. HYDRA-DIGGA, with Front Shovel, £1,850.
1951 J.C.B. 4, Hydraulic EXCAVATOR, demonstration machine, £2,550.
New J.C.B. 4, Hydraulic EXCAVATOR, two-lever machine, £2,550.
1957 Dinkum Digger, with Front Shovel, £850.
1957 International BTDG, with Dozer and Timber Withouth, £850.
1959 County BULLDOZER, £1,250.
1959 County BULLDOZER, £1,250.
1959 County With Angledozer, £350.
1950 Holling Shovel, £255.
1950 J.C.B. LOADALL 75, Hydraulic Front Shovel, £1,250.
1950 J.C.B. LOADALL 75, Hydraulic Front Shovel, £1,250.
1950 J.C.B. LOADALL 75, Hydraulic Front Shovel, £2,550.
1950 J.C.B. LOADALL 75, Hydraulic Front Shovel, £2,550.
1950 J.C.B. LOADALL 75, Hydraulic Front Shovel, £350.

5.1.250.
Thwaites three-wheel Diesel DUMPER, 5.105.
1958 Drott SKID-SHOVEL, with 4-in-1 Bucket, 5.2,550.
1958 Drott SKID-SHOVEL, with 4-in-1 Bucket, 5.2,550.
1951 Chaseside 700 LOADING SHOVEL, 1.850.
Weatherill Hydraulic Overloader LOADING SHOVEL, 5.858.
1950 Merton two-way LOADER, four-wheel-drive, 5.1,650.
1958 J.C.B. Loadall 65, Hydraulic LOADING SHOVEL, 5.950.

£950.

3 Rotary-Hoe TRENCHER, £850.

4 Rotary-Hoe TRENCHER, rebuilt, £1,150.

Rotary-Hoe SUPER TRENCHER, with Pipe Layer,
ex stock, £2,615.

Ing-Barford TRENCHER, £150.

Joids DRAIMAGE TRENCHER, £185.

ERNEST DOE AND SONS, LTD., Industrial Division, Ulting Maldon, Essex, lephone: Hatfield Peverel 311 (night 319). Therapia Lane, Mitcham Road, Croydon, Telephone: Thornton Heath 4095.

Therapia Lane, Mitcham Road, Crövdon. Telephone: Thornton Heath 4095.

PLANT HIRE SERVICE (LONDON).

OFFER THE FOLLOWING PLANT FOR SALE:
One I.C.B. HYDRA-DIGGA ADALL 65, with "avd. Bucket, two Backacter Blades, year 1958, first-class condition. Price Blades, year 1958, first-class condition. Price 770.

One 77d. Thames Trader TIPPER 6D, year 1959, first-class condition. Price 2750.

One Columbus. Dixon POWER FLOAT MACHINE, powered by 3.5-p. petrol engine, new February.

One Johnson DUMPER, 1yd. Price £155.
One 5/312 Stothert and Pitt MIXER, petrol driven. Price £65.

One Model 3 Stothert and Pitt Vibrating ROLLER, 43cut., fitted with new engine. Price £75.

MONORAIL EQUIPMENT—including Straights, Bends, Points and Rails, and Power Units.

Stockists for the Essen Load Dumper.

Stockists for the Essen Load Dumper.

For further details:

1 Chatfield Road, Battersea, S.W.11.
Telephone: Battersea 9218 (3 lines).

FOR SALE OR NIB.

Telephone: Battersea 9218 (3 lines).

OR SALE OR HIRE.

20-ton Henderson 2-motor Electric Scotch
DERRICK CRANE, 150ft. Jib. New December,
1959.

savallable—BOGIES and GABBARDS up to 75ft.

Apply METROPLANT, LTD.,
169/171 Cricklewood Broadway, London, N.W.2.
Telephone: Gladstone 7691-2-3.

WANTED to PURCHASE, Owen 12 cu. vd. Heavy Duty DIGGING GRABS. Details, prices and locations for inspection.—Write Box P.4646, "The Contract Journal."

FOR SALE, 3/4yd. Skyhi SHOVEL.—B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

Bell HIRE PLANT

Liner Machines delivered ex stock HARROGATE 84800



M. E. ENGINEERING LTD.

457 FINCHLEY RD., LONDON, N.W.3 HAMPSTEAD 7481-2-3

CONTRACTORS' PLANT FOR HIRE,
HIRE PURCHASE OR SALE:
Selection from our comprehensive fleet of Modern
Plant.

Selection from our comprehensive fleet of Modern CRANES (standard gauge).

CRANES (standard gauge).

12/15-ton Brownholat, 50ft. Jib.
10-ton Grafton, Diesel, 34ft. Jib.
8-ton Grafton, Diesel, 34ft. Jib.
9-ton Grafton, new Diesel conversion, 35ft. Jib.
5-ton Grafton, new Diesel conversion, 35ft. Jib.
CRANES (MOdellE ROAD).

COLOR (15 John Lory-mounted, extendible Jib.
30/70ft.

Ruston 10-ton, track-mounted, 40ft. Jib.
Ransomes 81-2ton, Diesel, 21ft. Jib. 1951.
Coles 6-ton, Petrol/Electric, 17ft. Jib. 1949.

Coles 6-ton, Petrol/Electric, 17ft. Jib. 1949.

Coles 4-ton, Diesel/Electric, on solids.
Jones 3-ton, Super 40. Three available.
Jones 3-ton, Super 20 and 22.

DERRICKS:

DERRICKS:

5-ton Wilson, 70ft. Jib, Electric.
5-ton Butters, 80ft. Jib, Electric, new 1949.
3-ton Smith, 47ft. 6in. Jib, single motor.

EXCAVATORS:
Two each 19RB and 10RB.
Weatherlii 3-yd. Loading Shovel, 1959.

(C.8. Hydra-Diga; Loadali, 3-yd., 1960.

J.C.B. Hydra-Digga/Loadall, *ayd., 1980.

LOCOS:

Fowler Diesel Locos., 150-h.p. (two).

Barclay 80-h.p., Ruston 88-h.p., Diesel.

Peckett Steam, 7in. x 12in.

BULLDOZERS:

Two D4, fully reconditioned, with Angledozers.

Mobile. BOILERS:

Mobile. BOILERS:

Mobile. BOILERS:

Mobile. BOILERS:

Mobile. BOILERS:

Also Static Coal-fred.

AIR COMPRESSORS (on pneumatics):

210 c.f.m., 100 p.s.l., Diesel

Four 105 c.f.m., 100 p.s.l., Diesel

ROLLDOZERS

ROLLDOZERO

Broomwads.

ROLLDOZERO

12-ton Aveling.

912-ton Marshall.

FOUR 105 c.f.m., 100 p.s.i., Diesel Broomwade.

ROLLERS:

A veiling.

15. ton Marshall.

6-ton Huber.

CONCRETE MIXERS:
Milliars 14/10, Diesel-driven.
Milliars 14/10, Diesel-driven.

Contractors Pumps, Roadforms, Flexible Hoses (4in.

Contractors Pumps, Roadforms, Flexible Hoses (4in.

Contractors Pumps, Roadforms, Flexible Hoses (4in.

Electric Motors, Diesel Engines, Portable Crushing

Plant, Light Rallway Equipment and Locomotives,

Scaffolding, Fittings, etc.

FRED. WATKINS (ENGINEERING), LTD.,

Coletord, Glos. Telephone 2271 (5 lines).

Coletord, Glos. Telephone 2271 (5 lines).

FOR Neals Rapid N 2-ton MOBILE CRANE, on pneumatics, Ruston 2VTH Diesel, in excellent condition, ex Ministry machine, painted to customer's requirements. £675.

10RB EXCAVATORS, 4000 and 12000 Series, with any equipment. From £600. 10RB EXCAVATORS, 4000 and 12000 Series, with any equipment. From £600.
10RB SKIMMER / DRAGSHOVEL / DRAGLINE and FACE SHOVEL EQUIPMENTS, in new or second-hand condition.

19/22RB SKIMMER/DRAGSHOVEL, FACE SHOVEL or DRAGLINE EQUIPMENTS, in new or second-

19/228B SKIMMEN DIAGSTOVEL, PACE SHOVEL
or DRAGLINE EQUIPMENTS, in new or secondhand condition 7-yd. Skimmer, Dragshovel, Face
showed, Dragline and Grab BUCKETS, in new,
reconditioned, not second-hand conditions.
All items of New and Second-hand Spares and
Equipment available for RB machines up to
and including S4RB. Available for HIRE, including Fleet of 10RB, 19RB and 22RB EXCAVATORS, with all equipments, including 10-ton
HARLEY JONES OF ALDRIDGE, LTD.,
Birch Lane, Aidridge, Staffs, Tel.: Aidridge 5221.

STEEL SHEET PILES, TRENCH SHEETS and PROPS
Urgently WANTED. All sections bought; large
and small quantities, Immediate payment.

Palace Street, London, S.W. 1, Tel.: Victoria 0252.

FOR SALE, 6-ton Ransomes and Rapier MOBILE
CRANE, in good working order, — W. V.
Phone 125.

ROAD ROLLERS FOR HIRE OR SA

10 CWT. to 10 TONS

HALTRAC LIMITED Bourne Works, Welmar Street, S.W.15 PUTney 4185

SHAWNEE POOLE DUMP TRUCKS FOR HIRE

We operate the largest hire fleet of these machines in England; consult us for all your requirements.

Our hire fleet also includes D.8's, D.7's, D.4's with Scrapers, Drott Shovels, Excavators all sizes, Cat. 977 Traxcavators and 25 ton Low Loaders.

PLANT HIRE OR CONTRACT

IRVING AINSWORTH (MORLEY) LTD.

MORLEY . Nr. LEEDS Phone: MORLEY 1800-1-2

TOTtenham 0401 (10 lines)

EXCAVATOR Ruston Bucyrus $\frac{3}{8}$, $\frac{5}{8}$ and $\frac{3}{4}$ cu. yd., all equipments.

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

FOR SALE.

FOR SALE.

Drott SKID SHOVEL, with Standard Bucket.

10 SHOVEL, 1959. £1,800.

11 SHOVEL, 1959. £1,800.

12 SHOVEL, 1959. £1,800.

13 SHOVEL, 1959. £1,800.

14 SHOVEL, 1959. £1,800.

15 SHOVEL, 1959. £1,000.

16 SHOVEL, 1950. £600.

16 SHOVEL, £600.

17 SHOVEL, £700.

18
reiepnone: Ferndown 837.

FOR SALE, 1956 Priestman Wolf EXCAVATOR, Machine No. A8091, wide tracks, Skimmer and Backacter Equipment, with three Buckets. Machine as new: only done eight months' work in capable hands. View an site.—AUBREY BELL, LTD., Tower Road, Ware, Herts.

Ware, Herts.

YAILABLE for HIRE with skilled operators,
50-ton Heavy Duty CRAWLER CRANES, fully
rigged with 120ft. Booms complete with luries, fully
insured.—PLANT SALES, LTD., 25 Castlereagn Street,
tondon, W.1. Telephone. Paddington 2663.8

tondon, W.1. Telephone: Paddington 2663'S.

WELDING PLANT for HIRE. Diesel driven
Welding Plants, single and twin. Any part of
country. Operators, if necessary.—UNDER WATER
WELDERS AND REPAIRERS, LTD., Roath Basin.
Cardiff.

Cardim.

FOR SALE. Smith 8 EXCAVATOR, with Backacter and 40ft. Tubular Jib, first-class condition, 10 months old. Price £2,600.

Write Box P.4650, "The Contract Journal."

FOR SALE, 3-ton Hand DERRICK, Soft. Jib.
Butters make.—Write Box P.4523, "The Contract

Journal."

TOR SALE, Broomwade Portable COMPRESSOR,
Model WR120.—William G. SEARCH, LTD.,
Whitehall Road, Leeds, 12. Tel. 639081 (10 lines). WANTED for cash: Benjo RAMMERS. Will collect.
METALWARE, 62 High Street, Croydon. Tel.:
Kelvin 3387.

OR SALE.

Aveling-Barford 99H Grader. £2.250.

Aveling-Barford 99H Grader. £6.00.

Foden 15-ton DUMPER. £1.000.

Friestman Panther with Shovel. £1.100.

10R8, 8000 Series, with Skimmer/Backacter.

10R8, with Shovel Equipments. £450.

Bray LOADING SHOVEL. Ford 4D. £350.

Aveling-Barford 41-yd. DUMPER. £450.

Smith 10 Dragline, Jib and Fairlead. £125.

Caterpillar D4, 7], Hydraulic Dozer and Winch. £450.

Seddon 10-ton LOW-LOADER. £70.

Otlons 4yd. SCRAPER. Price on application.

Model Durnapuli. Price on application.

Model Durnapuli. Price on application.

HoLLAND PLANT, LTD.,

Otley, Yorkshire. Telephone: 2940. Otley Yorkshire. Telephone: 2940.

Otley, Yorkshire. Telephone: 2940.

F OR S A L E.
Two International R6K3 Drotts, 1957 and 1958 machines and the second record re

pneumatics.

All enquiries to:

W. BIRD, PLANT HIRE.

Telephone: Ashford, Middlesex, 3627 and 5183. ARSSEN PILES FOR HIRE, 100 tons brand new Larssen 2 Sections, 30ft. long. Various lengths and sections of other piles available immediately ex depot.

and sections of other bird value.

DUDLEY VALE, LTD.,

Palace Street, London, S.W.1. Tel.: VICtoria 0252.

POR SALE, 400-ton FLAG PRESS, by Fielding and Platt, Ltd., three-station, complete with Accumulator and Fielding and Platt Water Pump.—Write for details to Box P.4618, "The Contract Journal."

FOR SALE. 127 2-ton Direct Off-barrel HAND WINCHES, C.I. Gears, and 59 Ditto Machine-cut Gears.—For appointment to view, write Box P.4641, "The Contract Journal."

SLOGGETTS PLANT HIRE.—For DINKUM DIGGERS, modern machines.—2 Burtons Road, Hampton Hill, Middx. Tel.: Teddington Lock 1138/9.

C DNTRACTORS PLANT EX STOCK.
DINKUM DIGGERS, new and second-hand. From £450.
Bray Two-wheel-drive SHOVELS, 112yd., new, List Bray Four-wheel-drive SHOVELS, new and second-hand. From £1,450.
Benford MIXERS, all sizes, new. From £92.
Benford DUMPERS, new and second-hand. From £100.
Bray FGAWLER SHOVELS, new and second-hand. From £120.
Bray CRAWLER SHOVELS, new and second-hand. From £120.
Bray CRAWLER SHOVELS, new and second-hand. From £120.
Bray CRAWLER SHOVELS, new and second-hand. From £35.
Bray CRAWLER SHOVELS, new Greens, 8cwt., 12cwt., 20cwt. From £350.
Bray TING ROLLERS, new, Greens, 8cwt., 12cwt., 20cwt. From £350.
Cond ROLLERS, 212-ton/10-ton. From £450.
Crawler EXCAVATORS, all equipments. From £350.
Warsop IUPITER RAMMERS, new.
Warsop RIPPERS and ROCK DRILLS, new.
Warsop RIPPERS and ROCK DRILLS, new.
Bray MILLIAM R. SELWOOD, LTD., Chandler's Ford, Hants. Telephone. CONTRACTORS' PLANT EX STOCK.
DINKLUM DIGGERS, new and second-hand. From WILLIAM R. SELWOOD, LTD., Chandler's Ford, Hants. Telephone: 2981.

Chandler's Ford, Hants. Telephone: 2981.

OTARY SCREEN, 31t, diameter, six sizes, very good condition: also 16in. CONVEYOR, 33ft. lone, complete Frame Idlers, End Rollers, etc.; also Hiscox PADDLE MIXER, suitable concrete or tarmac. Best offer secures, or exchange for Rapier 410 or similar Excavator, or Sand Washer and De-waterer. Candidations.—NU-LIME, LTD., Wetherby. Telephone:

FOR SALE, BTD6 Drott, fitted with Standard Bucket, 1957 machine, in good condition, recently overhauled by Cripps, £1,350 o.n.o. — All inquiries to:

Box P.4540, "The Contract Journal." OFFERS are invited for a 1959 Mathro Mastiff, in excellent condition. Lying Camberley.—For full details, 'phone Camberley 3421. MICHIGAN (GREAT BRITAIN), LTD.

FOR SALE, Matbro-Mantis EXCAVATOR, 1957.
Price £750 o.n.o.—W. M. ANNETTE AND CO.
LTD., Winchester Road Works, Basingstoke. Tel. 1256.

J. H. ROLLASON YOKESFORD HILL, ROMSEY, HANTS.

Telephone: Braishfield 395/6/7

Priestman Wolf Mk. III, Dorman Diesel Engine, fitted Backacter. III, Dorman Diesel Engine, fitted Backacter. III, Dorman Diesel Engine, fitted Backacter. III, Dorman Diesel Engine, fitted Dragline Jib. Ransomes and Rapier 410, Perkins Diesel Engine, fitted Dragline Jib. N.C.H. 150, fitted Dragline, Caterpillar D4 Engine.

nan Power DIGGER, mounted on Fordson

Tractor.
Liner Cumflow MIXER, 10T size, fitted Weighbatcher and Power Loading Shovel (1960).
Vickers VR180 TRACTOR, fitted Dozing Equipment and Double Drum Winch.
Vickers Vigor TRACTOR, fitted Dozing Equipment and Double Drum Winch.
Liner Roughrider DUMPERS, 15cwt. models (1960).

Notes of the Control
Engine. Lickeye 406 TRENCHER, 141₂in. Buckets, fitted G.M. 2-71 Diesel Engine veling Barford Self-hauling TRENCHERS, powered Bamford Engine.

powered Bamford Engine.
Aveling-Barford 419 cu. yd. DUMPERS, powered Dorman Diesel Engines.
Ston Buffalo Springfield ROLLER, powered by International Diesel.
8-ton Aveling-Barford ROLLER, powered by Perkins Diesel.

Perkins Diesel. Centrifugal PUMP SETS, fitted Crossley Diesel Diesel Engines and Sulzer Pumps, capable of 24,000 gallons per hour at 300ft; head. British Steel Piling 3-ton RIGS, powered Ford Industrial Engines. One pair Allis-Chalmers HD7 TRACKS (new).

One pair Allis-Chalmers HD7 TRACKS (new).
One pair Caterpillar D8 TRACKS (reconditioned).
SPARES for Allis-Chalmers, Le Tourneau, etc.

I. H. ROLLASON YOKESFORD HILL. ROMSEY, HANTS.

Telephone: Braishfield 395/6/7

WEATHERILL HYDRAULIC

F. E. WEATHERILL LTD USED EQUIPMENT DIVISION

We can meet your Used Loading Shovel requirements either at our main Works at Welwyn Garden City or our Depots at Walsall, Manchester, West Hartlepool and Bothwell.

Weatherill Hydraulic Loader, Type 12H, powered by Fordson Diesel Engine, with Brockhouse Torque Converter, Fitted with 3a cu, yd. Scoop. 29 x 8 front and 1400 x 24 rear wheel and tyre equipment ...\$1,350

1960 WEATHERILL Hydraulic Industrial Loader, Type \$2, powered by Perkins P3 Diesel Engine, with 1₂ cu, vd. Scoop, Fully enclosed Driver's Cab. lighting equipment and towing hitch. Very little used £1.250

1959 (August) WEATHERILL Hydraulic Loader, Type 12H, with Fordson Diesel Engine. With

1956 CHASESIDE Loadmaster, Model 500, powered by Fordson Diesel Engine, with 3 cu. yd. Scoop. Lighting equipment and towing hitch. 900 x 16 tyres at front and 1400 x 24 at rear. Fully enclosed Driver's 6550

1958 MUIR-HILL Loader, Type LH1, powered Perkins P3 Diesel Engine and fitted v 13 cu. yd. Scoop

Ask for fuller details of these and other machines

F. E. WEATHERILL LTD USED EQUIPMENT DIVISION Tewin Road

WELWYN GARDEN CITY, Herts. Tel: Welwyn Garden 24221-5

NEALE, WRIGHT

& COMPANY LTD.

for CONTRACTORS' PLANT

Thwaites Dumpers Parker Mixers Pegson Pumps A.C.E. Vibrators & Hoists Stothert & Pitt Rollers Pegson Rammers & Rippers Post Hole Borer

NEW & SECONDHAND PLEASE SEND YOUR ENQUIRIES

H.O.: Coventry Road, Cubbington, Leamington Spa. Tel.: Spa 924 & 925

London: Tol.: FiNchiey 4322

CONTRACTORS PLANT AND LOW LOADING VEHICLES OF ALL TYPES AND SIZES

A.E. FARR (Plant Hire) LTD

WESTRUBY . WILTS . Tol: 356 (Stiess)

MOORE'S PORTASILO

Tel: **TOTtenham** 0401 (10 lines)

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

E607.—Marion 7400 EXCAVATOR, 1957, with 200ft, Jib and 11 cu. yd. Dragline Bucket, powered by electric motors. Dragline Equipment, 7 cu. yd. capacity, 1957, Lying Yorks. E611.—Ruston-Bucyrus SARB EXCAVATOR, 21000 capacity, Ruston Diesel Engine, £16,000. E610.—Ruston-Bucyrus SARB EXCAVATOR, 24000 capacity, Ruston Diesel Engine, £16,000. E610.—Ruston-Bucyrus SARB EXCAVATOR, 14000 Series, Ruston Diesel Engine, base machine, £6,500.

Capacity,

Series, Ruston-Bucyrus Sense
Series, Ruston Diesel Engine, base Imaumous
Series, Ruston Diesel Engine, base Imaumous
ES83.—Ruston-Bucyrus 38RB. 17000 Series, with
ES83.—Ruston-Bucyrus 33RB EXCAVATOR, 4900
Series, with Drapline Equipment, 114 cu. yd.
capacity, £1,900. Lying Worcs.
E601.—Ruston-Bucyrus 10RB EXCAVATOR, 17000
Series, Skimmer, Backacter and Drapline, Ruston
Diesel Engine, 3a cu. yd. capacity, £1,575.
Lying Heritar Do TRACTOR, 9U, 12000 Series,
with Birtley Hydraulic Buildozing Equipment,
£1,900.

T626.—Caterpillar D6 TRACTOR, 9U, 12000 Series, with Birtley Hydraulic Bulldozing Equipment, £1,900
D631.—Muir-Hill 10B DUMPER, Perkins P6 Diesel Engine, good order, £275. Lying London, R628.—Springfield Buffalo ROLLER, 35/5-ton, Ford 4D Diesel Engine, £475. Lying Bucks.
New 12-V BATTERIES, Heavy Duty, 153-Amp. 50 per cent, list price.

MATHEW BROTHERS,
Matbro House, Beddington Lane, Croydon, Surrey.
Tel.: Thornton Heath 3402.

Tel.: Thornton heath 3492.

FOR SALE — SURPLUS TO REQUIREMENTS.
3ft. Nordberg Standard CONE CRUSHER, with
motor and starter.
No. 19 Kennedy CRUSHER, with motor.
20-ton ROAD WEIGHBRIDGE: chick of two.
Niagara 10ft. x 4ft. SINGLE-BECK SCREEN.
Niagara 8ft. x 4ft. SINGLE-BECK SCREEN.
120-ton ROAD WEIGHBRIDGE.

120-ton RO

Niagara 8ft. x 4ft. SINGLE-DECK SCREEN.
120-ton STORAGE BUNNER, with Rotary Screen and Elevator.
33ft. 2 sq. in. 4-CORE CABLE.
D. DAVIES AND SONS (DINAS), LTD., Llansawel, Llandeilo. Tel.: Talley 213.

LOW PRICE for quick SALE.—272 Frodingham No. 3 Section STEEL SHEET PILES, in lengths approx. 25ft. Lying Yorkshire.
DUDLEY VALE, LTD.,
9 Palace Street, London, S.W.1. VICtoria 0252.

NOTOR SCRAPERS. S21s and DW21s, D9 Pusher and Grader, available for HIRE now on favourable terms.—LEHANE, MACKENZIE AND SHAND, LTD., Rowsley, Matlock, Derbyshire. Tel.: Darley Dale 3391.

WILL PURCHASE, Good Second-hand PLANT and ENGINEERING EQUIPMENT, including Cranes, Forklitt Trucks, Machine Tools, etc.
Write Box P.4556, "The Contract Journal."

STOTHERT AND PITT 28W VIbroll ROLLERS, for Immediate delivery, £345 each.—ABELSON AND CO. (ENGINEERS), LTD. Tel.: SHEIdon 2424.

SLOGGETTS PLANT HIRE.—Fleet of DIGGER-LOADERS for immediate HIRE.—2 purtons Road, Hampton Hill, Middx. Tel.: Teddington Lock 1138/9. FOR SALE, Wnitehead Double-shafted PUG MILLS, complete with Conveyors,—Write for details to Box P.4619, "The Contract Journal."

FOR SALE, Robell Articulated CONCRETE CON-VEYOR.—WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

THE LEADING ESSEX PLANT HIRERS

DUMPERS . MIXERS . PUMPS ROLLERS . DROTTS . CRANES WELDING SETS . COMPRESSORS

hire it from ...

E. H. ROBERTS & CO. (SOUTHEND) LTD. 251/5 CHURCH ROAD, THUNDERSLEY, ESSEX. SOUTH BENFLEET 2364/2365

.......

THE CHEAPEST EXCAVATORS in the country are available from AXWORTHV.

Priestman Wolf, new 1944, ³gvd, Grab, Petrol/Parafin (Scotland), £250.

Priestman Parther, new 1943, ⁵ayd, Grab (S. Wales),

£7.500.
37BE, 11000 Series, Dragline (London), £2.950.
43RB, 4000 Series, Dragline and F/S (5. Wales), £5.450.
54RB, 10000 Series, base, Electric (5. Wales), £7.750.
54RB, 10000 Series, base (5. Wales), £7.50.
54RB, 21000 Series, Dragline (North), £16.500.
54RB, 22000 Series, F/S (Midlands or S. Wales), £3.750.

ma 802, 5000 Series, Dragline or F/S (Midlands). and H., 6558, new 1951, crane rigged, Cummins Diesel.

Piesel.
Ring Windsor 3434 or 3384,
AXWORTHY AND COMPANY, LTD.
(Drotts for Hire),
Straight Road, Old Windsor, Berks.
Telegrams: Axworthy, Windsor.

Telegrams: Axwortny, Windsor.

OFFERED with six months' guarantee.—Two exidemonstration 81 b.h.p., Bray BL450TF 4-wheel drive TRACTOR SHOVELS and two 91 b.h.p. BL45ST 4-wheel drive TRACTOR SHOVELS, all with 15g cu. yd. Buckets and disc brakes. Used on a few demonstrations.—SEARCH, Leeds (Tel. 639081—10 lines), or SEARCH, Liverpool (Tel.: Simondswood 3361).

REQUIRED URGENTLY, J.C.B. DIGGER, new or second-hand, for bulk excavation work.
Write Box P.4603, "The Contract Journal."

FOR SALE, Barber-Greene Bituminous MIXING PLANT.—B.G. PLANT (SALES AGENCY), LTD., Watlington 44 (Oxon).

re best CASH BUYERS of EXCAVATORS, TRACTORS, PLANT and MACHINERY. You will deal better at:

> A.R.C. MOTOR CO., LTD., Radhill Works, Arnold, Nottingham. Telephony 26-3331/5.

> > Tel: SHEldon 2424

GAZEWAY PLANT HIRE, LTD.

OFFER FOR SALE EX STOCK.
All Plant offered is the property of this Company.

ORB. 12000 Series, Skimmer/Backacter or Dragline, 12700

ORB SKIMMER/BACKACTER EQUIPMENT. £175.

SVERGEN MARCHES SCACKACTER EQUIPMENT. £175.

TRACTOR TRACK CLAMPS. Per pair, £7.

Clark FORKLIFT, Petrol, 4,8001b. Lift. £600.

4-ton Aveling ROLLER, Ruston Diesel, 3 Roll.

5250.

W. T.S. £250.

EX. £250.

Piction of the company of the comp

\$125.
Coles 1-ton CRANE, Petrol/Electric, on pneumatics. \$450.
\$50 Concessionaires for Weserhutte Wesserwolf.

Agents for Milliars Machinery, Pegson Rammers and Pumps, Warry, Details from:

GAZEWAY III ARCHITECTURE DITTON, Surrey, Telephone: Emberbrook 2800/6142.

Telephone: Emberbrook 2800/6142.

TEL SHEET PILES FOR SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE.

SALE

DUDLEY VALE, LTD., Palace Street, London, S.W.1. VICtoria 0252

Y ANT B DI CATERPILLAR TRACTORS,
TRAXCAVATORS and EQUIPMENTS, not more
than nive vears old—"Phone Rothwell 3258, or write
IAW BONE WORKS, Wood Lane, Rothwell, Yorks.

MITCHAM OF BURWELL

ALL TYPES OF PLANT AND MACHINERY.

A selection from our stock of small machines:
Caterpillar D4 2T. L.P.C. Hydraulic Angledozer,
choice two, £375.
International BTD6 Hydraulic ANGLEDOZER, £750,
1959 J.C.B. Hydraulic DIGGER, £500.
Selection of the selection of t

MITCHAM, Burwell (396), Cambs.

RAILWAY MATERIAL

RAILS OF ALL SECTIONS AND ALL ACCESSORIES—CONTRACTORS' PLANT, TOOLS, ETC.

INSTALLATION OF SIDINGS UNDERTAKEN

ARMYTAGE & SONS, LTD.

STATION ROAD, WHITTINGTON MOOR

CHESTERFIELD

PLANT SALES LTD.,

25 CASTLEREAGH STREET, LONDON, W.1 Telephone: PADdington 2663-4



Rapid expansion has decreed us Greater London's Largest Fleet Hirers of

1961 1 yd. "DROTT" SKID SHOVELS



Always available for Hire Tel: THOrnton Heath 3402 (5 lines)

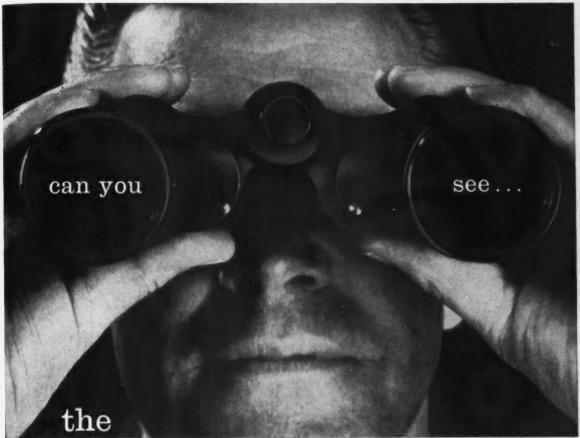
POWER PLANT HIRE (Beddington) LTD. ddington Lane, Croydon, Surrey

There is no better medium than

THE CONTRACT JOURNAL

for small classified advertisements

Telephone for linage rates to WATerloo 3411



way ahead?

You probably have plans—to step up production, to expand, to modernise your machinery. But carrying them out may not be so easy. Can British Wagon help? The British Wagon Finance Plan allows you to acquire new machines or plant without seriously affecting those vital capital reserves. The terms of the B.W. Plan are economical and flexible; the procedure simple. Discuss your requirements with your local British Wagon branch manager—for immediate, friendly and practical advice, backed by over 90 years' sound financial experience . . .



... or write for our leaflet Financing the Cost'. It gives you full details of how the British Wagon Finance Plan can help you. British Wagon

Head Office:

Moorgate, Rotherham, Yorkshire Tel. Rotherham 5466 Southern Head Office: Rotherham House, Grosvenor Crescent, London, S.W.1. Tel. Belgravia 8000

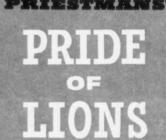


BW/M/83/6

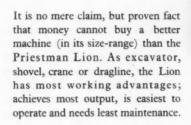
Each one tailor-made for a specific job

Each one unbeatable in its class...









It repays its own cost faster, too. In any -in all -its forms, Priestman are proud of the Lion. As you will be when you too are a Lion-owner.

- Full Air Control Cross-Roll Bearing Slewing Ring Fully-enclosed Pump-lubricated Bearings
- And every quality feature that can be built into an excavator/crane this size

The World's most advanced Excavator Crane of its size

Full range of front-end equipments up to 1 cubic yard capacity

PRIESTMAN BROTHERS LIMITED · HEDON ROAD · HULL · PHONE: HULL 75111 · TELEX: HULL 52120 · TELEGRAMS: 'PRIESTMAN HULL'

Parts, Sales and Service Depots at HULL, LONDON, BIRMINGHAM and GLASGOW

10 8 61 THE CONTRACT JOURNAL VIII

HIGH-SPEED SURFACE DRESSING



with a better finish



An Aveling-Barford Pneumatic-tyred Roller, on hire from Road Rollers Ltd., rolling chippings in the Borough of Wandsworth.

Contractors: W. & J. Glossop Ltd.

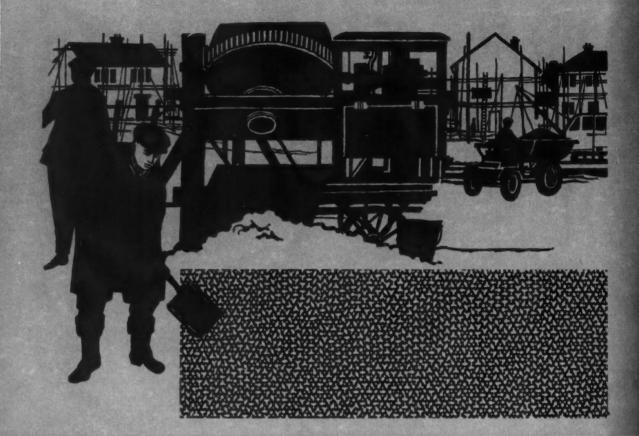
Pressed—not impacted—into place, chippings for surface dressing are firmly keyed without crushing by the Aveling-Barford Pneumatic-tyred Rollers. Their wide weight range—5 to 15 tons—and four speeds forward and reverse—3.20 to 15.30 m.p.h.—also enable them to speedily produce dense pavements on all types of base course and on asphalt wearing surfaces.

For full particulars please write for List No. 1839

Aveling-Barford

PNEUMATIC TYRED ROLLERS

AVELING-BARFORD LTD . GRANTHAM . ENGLAND



TARMAC SLAG

AGGREGATES FOR CONCRETE

Prompt supplies of Tarmac Slag are available for use as coarse aggregate in concrete throughout England and Wales. For a concrete of superior strength, yield and fire resistance, Tarmac Slag is the aggregate you need.



ENQUIRIES PLEASE TO HEAD AND DIVISIONAL OFFICES

TARMAC ROADSTONE LIMITED

0

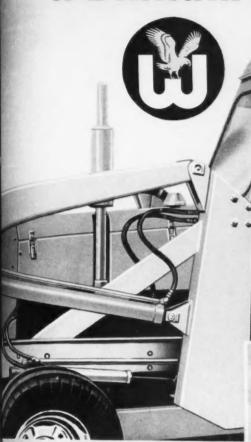
Head Office and Central Division Ettingshall, Wolverhampton Telephone Bilston 41101

Northern Division
Bowesfield Lane, Stockton-on-Tees
Telephone Stockton-on-Tees 65101

Southern Division 25/28 Buckingham Gate, London. S.W.1 Telephone Victoria 6877

AMBITION GRATIFIED ...

a Dinkum on every site!







It has long been the ambition of Mr. Ronald Howard the Managing Director of Messrs. C. J. Howard & Sons Ltd. one of the largest building contractors in the Medway towns to have one of his own 'Dinkums' working on every principal site upon which they are operating.

His ambition has now been gratified. Our photograph shows the handing over of a further two machines to add to his existing fleet of Dinkums.

The above story illustrates quite clearly the confidence that the building trade has in the Dinkum range of earth moving equipment. Dinkums are renowned for their capable handling of trenching, bulk excavation, square holing and speedy footing excavation; in fact any of the earth moving jobs associated with the building industry.

Main distributors for KENT & EAST SUSSEX

TOWNSEND (AYLESFORD) LTD.

HIGH STREET, AYLESFORD, KENT

Tel. Maidstone 7309

PEMONSTRATIONS SALES SERVICE PART EXCHANGES HIRE PURCHASE

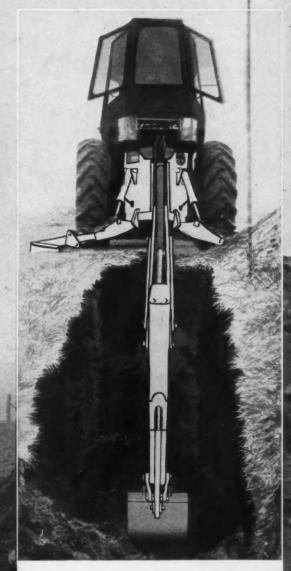
ONLY WHITLOCK provides a complete range of hydraulic excavators

.... . THE EMPTRACE IMPERAL (C. C.

DIG DEFE



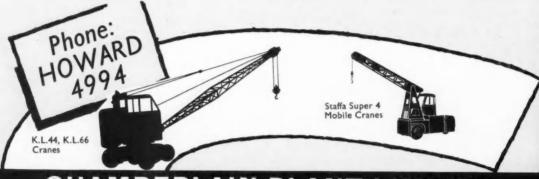
Shawnee
"WARRIOR" DIGGER



The Shawnee "Warrior" Digger gives you real powerful, deep digging action to a depth of 11 ft. 3 ins...180° angle digging... high loading to 8 ft. 10½ ins... and a long 17 ft. reach. Contractors will welcome this versatile, speedy, easy to operate, more economical machine—a machine with the highest power-to-weight ratio built today. Contact us NOW for fuller details of the Shawnee "Warrior" Digger—the Digger that is available for all leading makes of standard Tractors.

WARRIOR

Always remember Chamberlain initially for your plant hire requirements



SMITH 21 Excavators BK 50 Excavators







M.E.II Truck Cranes

Case Loaders

Mobile Hoists



Vibrating Rollers J.C.B. Hydraulic Excavators



Fork Lift Trucks



Rollers

K.L.15 Cranes

Jenbach Compressors



B.K. 50 Crawler Cranes Smith 21 Crawler Cranes

We can now offer an even wider range of equipment and machines from our Plant Hire Fleet. Modernisation is our keynote for 1961-whatever your requirements, wherever the job, Chamberlain Plant Hire Fleet is at your service.

Chamberlain are always ready to help YOU

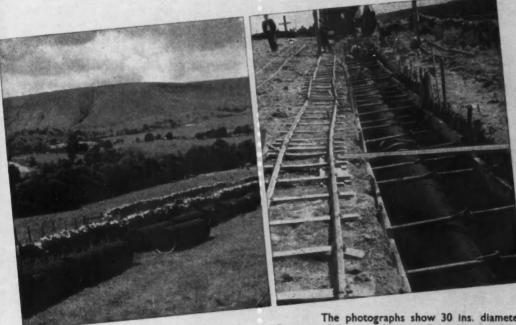
CROWN WORKS, SOUTHBURY ROAD, ENFIELD, MIDDLESEX

STANTON & STAVELEY

PRESTRESSED Concrete Pressure Pipes

High external load Low maintenance cost

High carrying capacity Low permanent pumping



The photographs show 30 ins. diameter Prestressed Concrete Pressure Pipes being laid for the Fylde Water Board from the Hodder Valley to Blackburn.

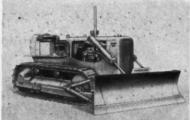
Engineer: Frank Law, Esq., B.Sc. Tech., M.I.C.E., M.I.W.E.

Further particulars from Prestressed Concrete Pipe Sales Dept. Telephone Ilkeston 2121.

Stanton and Staveley Sales Limited - Near Nottingham



D4C Tractor, 65 H.P., British Built



D6B Tractor, 93 H.P.



D7D Tractor, 140 H.P.



D8H Tractor, 235 H.P. Power Shift, Direct, or Torque Converter Drive, British Built

AVAILABLE EX-STOCK FROM

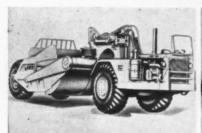


D9E Tractor, 335 H.P. Power Shift, Direct, or Torque Converter Drive



463F Scraper, 28 cu. yd. heaped capacity, British Built

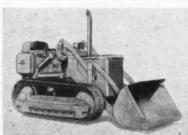
BOWMAKER



619B Tractor/442 Scraper, 225 H.P. 18 cu. yd. heaped capacity



631A Tractor Scraper, 420 H.P. 28 cu. yd. heaped capacity



Range of Track Type Traxcavators 933F, 955F, 955H (illustrated), 977H



Range of Wheel loaders 922A, 944A (illustrated), 966A Traxcavators

Caterpillar
design and
manufacture the
world's largest
range of
earthmoving
equipment
Bowmaker
stock them all.

Bowmaker also offer today's best value in a wide range of used equipment.

New or used all with the reliable Bowmaker Parts and Service backing.

BOWMAKER (PLANT) LIMITED

AUTHORISED CATERPILLAR DEALER

Caterpillar and Cat are Registered Trademarks of Caterpillar Tractor Co

WATLING STREET : CANNOCK · STAFFS. Tel: Cannock 2551 T

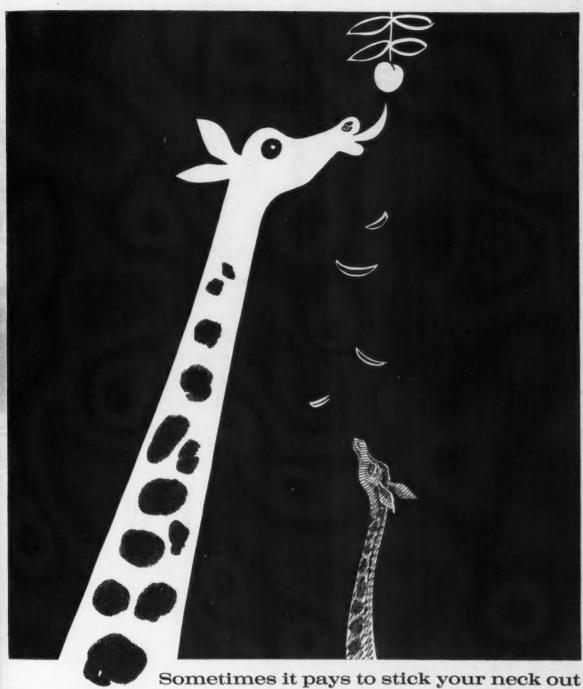
g1

p

CULVERHOUSE CROSS · CARDIFF GLAMORGAN Tel: Cardiff 71231

EXHIBITION WAY - EXETER - DEVON Tel: Exeter 66313

HULSE ROAD · SALISBURY · WILTSHIRE Tel: Salisbury 4965 CHESTERFIELD ROAD · CLAY CROSS DERBYSHIRE Tel: Clay Cross 2571



The juiciest plums are at the top of the tree: perhaps you dream of reaching for them? But that means growing. And growing costs money. Money? Why, that's just what UDT is for. If it's time you added or replaced equipment: if it's time you modernised your production: if it's time you enlarged your premises: then it's time you came to us at UDT. Maybe we can help you to those juicier plums.

UDT HELPS INDUSTRY TO HELP ITSELF

UNITED DOMINIONS TRUST (COMMERCIAL) LIMITED . 51 EASTCHEAP . LONDON EC3

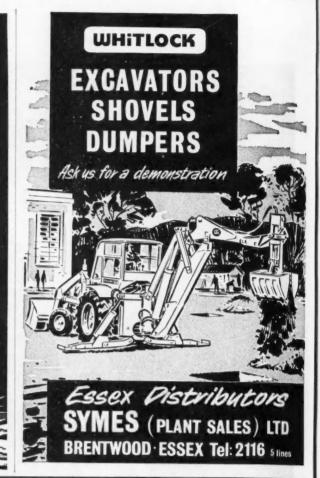
Man with an easy job

He's lucky this week...he's only chilled and stiff.
Last month was tougher; then he crawled fifty yards
up a twenty-four-inch sewer to clear a valve...
forty feet below the surface. He doesn't scare easily.
He's a crack frogman of Universal Divers. He's
a fully-experienced oxy-arc welder and cutter.
He's also been an underwater stonemason. He can
carry out a submarine survey in nil visibility.
He's skilled in using explosives.

He's one of a team of Universal divers and frogmen who can report anywhere in the British Isles at a few hours' notice. Next time you need a diver in a hurry—send for Universal.

UNIVERSAL DIVERS LTD





GENERAL ROADWORK

THORNTON HEATH 6989

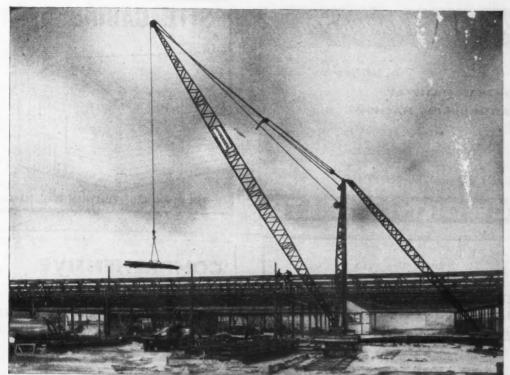
LEWES 2291

150

AGENTS FOR

CARTRUK

MOBILE UNITS





E ANDERSON CRANES FROM CASWELL

EXTENSIVE MODERN FLEET OF HAND, STEAM AND ELECTRIC DERRICKS FROM 15 CWT. — 30 TONS CAPACITY WITH JIB LENGTHS UP TO 135FT.

AVAILABLE FROM DEPOTS AT LONDON AND BIRMINGHAM WITH COMPLETE ERECTION AND SERVICING FACILITIES.

CASWELL CRANES & ERECTION LTD.

GROVE WORKS, HAMMERSMITH, LONDON W.6. Phone: RIVerside 8922/5

156 CHARLES HENRY ST., BIRMINGHAM 12. Phone: MID 7063/4

THE A.C. PLANT & HIRE CO. LTD.

TAYMOUTH WORKS, CARNOUSTIE - Phone: CARNOUSTIE 2215

HAVE YOU A BORING JOB ...?

Then ring WALTHAM CROSS 26211/6 to hire

CHESHIRE HIGHWAY
EARTH BORING MACHINES

fitted 9", 12", 14", 16", 24" Augers Maximum depth 20'

READY TO TRAVEL ANYWHERE

ACWORTH (PLANT) LTD.



Telephone: GRA 3401-3

ARTHUR FOSTER (EAST HAM) LTD.

STEVENAGE ROAD, EAST HAM, E.6

PLANT AND TACKLE TO
LIFT UP 100 TONS

COMPREHENSIVE MODERN PLANT

Capable of excavating 30,000 to 40,000 cu. yds. per week.

Available for contract work, commencing September.

Write Box P.4599 "The Contract Journal"

FOR IMMEDIATE HIRE

80

43 RB's 38 RB's

33 RB's

22 RB's

19 RB's

10 RB's Lorry mounted cranes

В

Δ

D

CRAWLER CRANES UP TO 50 TON CAPACITY 802 & 1201 LIMAS

D4, D8 TRACTORS EUCLID REAR DUMPS

GALION GRADERS

DERRICKS, 5, 7, 10, 20 ton PILING EQUIPMENT

CRUSHING PLANT NEALS CRANES 4/6 ton 933 & 955 SIDE TIP 977 & DROTT SHOVELS CHASESIDE & MICHIGANS DINKUM DIGGERS 3yd. DUMPERS 16/60 TRENCHERS COMPRESSORS

Also all other Civil Engineering Plant available

ROADS & RUNWAYS (Plant Hire) LIMITED

26 VICTORIA STREET, LONDON, S.W.I.

Telephone: ABBEY 4905

GRADED CLINKER

Speciality: Washed and Graded Clinker Filter Media Largest Screening Plant in London, output 100,000 tons per annum

G. J. PALMER & SONS

Ferndale Works, Manorway, East Ham, E.6

DEPOTS AND WHARVESI BARKING, POPLAR AND KINGSTON-ON-THAMES
Established 1869 Ring Albert Dock 3464 (4 lines)

ASHES & BREEZE

& RAIL



in standard lengths of 250 ft. and 500 ft.

The outstanding feature of moulded hose is the long lengths in which it is available without jointing, thereby distinguishing it from wrapped ply hose.

Specially suitable for compressed air supply to pneumatic tools, paint sprayers, etc., for oxygen and acetylene used in welding, water and for all general purposes.

MOSELEY

DAVID MOSELEY & SONS LTD.

ARDWICK, MANCHESTER 12 · 55 NEW BOND STREET, LONDON, W.I

54 GEORGE ROAD (ISLINGTON ROW), EDGBASTON, BIRMINGHAM 15

10

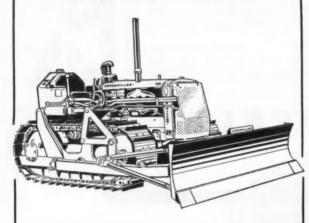
FII

contact

BARKING DEVELOPMENTS

CO. LTD.

for



MOBILE COMPRESSORS PORTABLE COMPRESSORS DIESEL-DRIVEN **EXCAVATORS** MECHANICAL SHOVELS TRAXCAVATORS **DUMPERS BULLDOZERS** ROAD ROLLERS CONCRETE MIXERS

MODERN MACHINES EXPERIENCED OPERATORS

HOURLY, DAILY or WEEKLY RATES

PHONE: RIPPLEWAY 2408 & 1245

(3 lines)

ADDRESS: FRESH WHARF HIGHBRIDGE ROAD BARKING **ESSEX**



UALITY THE CLAIM



15 or 22½ cwt. DIESEL DUMPER The dumper that brilliant engineering produced for you!

You may pay more for the Roughrider than for other dumpers, but nowhere will you get the staying power, the high quality of materials and design that Liner have built into this splendid machine. Proof is in the low maintenance costs (annual average is only £3/10/-) and in the years of staunch service your Roughrider will give you.

CONSIDER THE ADVANTAGES

I Propeller shaft not needing lubrication.

- P.R.M. constant mesh change-on-move gear box with three forward and reverse speeds.
- 3 Small turning circle makes it the ideal machine for narrow roads.
- 4 All-in-line transmission without belts or chains.
- 5 Height of skip gives easy loading from the mixer.
- Low centre of gravity enables the Roughrider to operate under extremely adverse conditions.
- 7 Guards protect driver and working parts.
- 8 Fully floating rear axle.
- 9 Patented two-position skip.

HIRE PURCHASE TERMS ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY CO. LTD.

268, PARK ROAD, GATESHEAD, 8. Phone: 72501 Grams: 'Liner, Gateshed London Office: Liner House, Lexden Road, Acton, W.3. Tel: ACOrn 8931

Please send full details of the Liner 'Roughrider NAME.

ADDRESS.

268

SOME EXAMPLES OF FINE TIMBER BUILDINGS

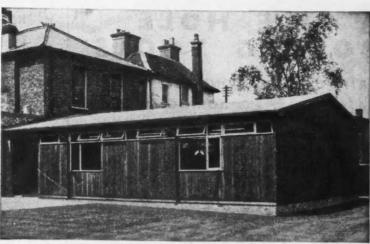
Pavilions Clubs Schools Libraries Hospitals Canteens Showrooms Estate Offices

10.

TD.

eshed 1931

268



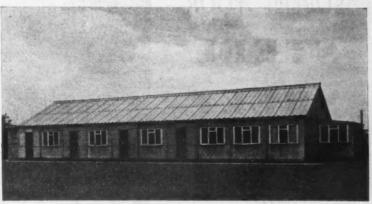
EXTENSION TO CENTRAL LIBRARY, SIDCUP, KENT.

Photograph by courtesy of the Chislehurst & Sidcup U.D.C.



DINING HALL FOR THE SACRED HEART CONVENT SCHOOL, HITCHIN, HERTS.

Photograph by courtesy of The Reverend Mother.



SPORTS PAVILION. Photograph by courtesy of W. T. Glover & Co., Ltd., Manchester.

details of the buildings shown and all impounding systems, are given in their New adogue which is unique, in that it gives at face, sizes, prices, plans and specifications.

THORNS

THORN & SONS LTD. (DEPT. 73) BRAMPTON ROAD, BEXLEYHEATH, KENT.

Telephone: Bexleyheath 0021 (10 lines). Established 1896

PILE HOLE BORING TOOLS

TRIPODS CONCRETE PLACERS CASINGS **BORING DOLLIES** CLAMPS SLUDGE BAILERS SHOES DRILL LINE JACKS ROPE BLOCKS DRIVE CAPS FOR QUICK DELIVERY

DUKE&OCKENDER

LITTLEHAMPTON · SUSSEX · Telephone: Littlehampton 6 London Office: 28 Victoria Street. Telephone: ABBey 6338

MECHANICAL AND NON-MECHANICAL PLANT HIRE



Warsop Power Tools Ltd.

LIGHTWEIGHT STAGINGS :: LADDERS :: STEPS SCAFFOLD BOARDS :: SURFACING MACHINES STEEL TUBES :: ALUMINIUM ALLOY TUBES **CONCRETE BREAKING HAMMERS:: PUMPS** FLOOR SANDERS :: RAILWAY SLEEPERS **VIBRATORY ROLLERS :: COMPRESSORS** CONCRETE MIXERS :: SITE HUTS PAINT SPRAYERS :: TARPAULINS TRESTLES :: DANGER LAMPS **TOWER LADDERS :: DUMPERS** CRANES :: VIBRATORS

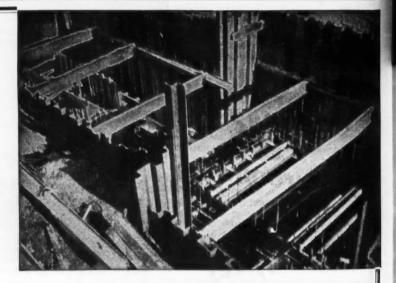
Phone or write for details

CAMPBELL-GRAY, LTD. 68/70 PENGE ROAD, SOUTH NORWOOD, LONDON, S.E.25

Tel.: SYD, 3131 (5 lines)

SUBLET YOUR STEEL SHEET PILING

TO



W. A. DAWSON LTD.

SPECIALIST EQUIPMENT FOR ALL SIZES ON CONTRACT

SUNDON PARK, LUTON

LUTON 52203

The best allround dumper yet - heres why



Strength · Balanced Design · Reliable

Thwaites Two-way side discharge dumper doubles up dumper versatility. Provides hydraulically controlled side discharge of material to left or right of dumper whilst travelling under load. Discharge is by finger tip control on steering column, I' 3" above ground level. Lip of the skip is within the driver's vision at all times. Low centre of gravity, balanced design, ruggedness of construction. All features that add up to Thwaites value for money.

Thwaites

DIESEL DUMPER SPECIALISTS

THWAITES ENGINEERING CO. LTD. · CUBBINGTON · Nr. LEAMINGTON SPA · Tel. 3089

611R Cogent

BARFORD

BARFORD

BARFORD

BOTH STATES OF THE STATES

Here's a dumper that is designed to outwork, outlast, and have greater availability than any other unit of its size.

Rugged in construction, powerful and dependable, its big payload capacity ensures the maximum operating economy under all site conditions. With its in-line transmission every ounce of engine power of the Barford '150' is used for traction—it takes the tough rides in its stride.

Barford after-sales service, as users know, is second to none.

It will pay you to get full particulars of this outstanding, profit-making Dumper write today for List No. 1825.

it's better by far to buy

BARFORD '150' FEATURES

CHOICE OF THREE TWIN-CYLINDER AIR-COOLED DIESEL ENGINES.

CONSTANT-MESH THREE-SPEED AND REVERSE GEARBOX WITH AUTOMOTIVE DRIVE SHAFT.

HEAVY-DUTY AXLE WITH HYPOID DRIVE AND FOUR-PINION DIFFERENTIAL.

BIG CAPACITY, POSITIVE TIP HOPPER FOR EARTH OR CONCRETE.

LOW LOADING HEIGHT.

FRONT AXLE DRIVE; REAR WHEEL STEERING.



BARFORD

BARFORDS OF BELTON LTD . GRANTHAM . LINCS.

Your BARFORD dealer is a SERVICE dealer

MIDLANDS

Midland Contractors Plant Repair Service. 7 and 9 Broad Street Jetty, Coventry, Warwicks. Coventry 89154

Limited. Ashford Road, Welford Road, Leicester. Leicester 78241

Reliant Plant Service. Hall Lane, Walsall Wood. Staffs. Brownhills 3397

Derby 56315

A. J. Saunders (Tractors) Limited.

LONDON AND HOME COUNTIES Arted & Co. Ltd.. 59, Kingsley Avenue, Hounslow, Middx. Hounslow 1400

Hills Plant Ltd.. 12. Burleigh St., Strand, London, W.C.2. Temple Bar 0321

R. G. Gray. Bryant Ave., Gallows Corner. Romford. Essex. Ingrebourne 43526

Holland-on-Sea Motors Limited. Holland-on-Sea, Clacton, Essex. Holland-on-Sea 2205

Townsend (Aylesford) Limited.

Western Hire Co. Ltd.. Hayes Road, Southall, Middx.

SOUTH AND SOUTH WEST J. A. Bradbury. 580, Reading Rd., Winnersh, Berks. Wokingham 1464

Hunt & Co. (Sournemouth) Ltd., 63-65, Holdenhurst Road, Bournemouth. Bournemouth 23366

Henry Kelland & Co. Ltd., 42-44, St. Johns Road, Bridgwater, Somerset. Bridgwater 4066

Avonmouth 3335

S. M. Tidy (Plant Hire) 161, Preston Road, Brighton, 6, Sussex. Brighton 59261

Bean-Hearne & Co. Ltd., Highgate Works, Swan Is Leeds, 10. Leeds 72410

Castleford Road, Allerton Bywater, Castleford, Yorks. Castleford 2910

52, Infirmary Ro Sheffield, 6. Sheffield 28702

Geo. Thompson (Beverley) Limited, Limited, Swinemoor Lane, Beverley, Yorks. Beverley 82207

W. L. Thompson (Agricultural & Industria Engineers) Ltd., Sherburn-in-Elmet, Yorks South Milford 456

T. W. Ward Ltd., Albion Works, Sheffield. Sheffield 26311

Wheatley & Whiteley Ltd.. 99, Kirkstall Road, Leeds, 3. Leeds 31122

C. & A. Plant Services Limited. 202-212, Heald Grove. Rusholme, Manchester. Rusholme 7291

Stephensons Plant Hire. 181-183, Price Street, Birkenhead, Cheshire. Birkenhead 9224

SCOTLAND AND NORTHERN COUNTIES Fewsters Ltd., Garden Street, Blaydon, Co. Durham. Blaydon 342

Thos. W. Ward, Ltd., 18/24 Fore Street, Scotstoun, Glasgow, W.4. Scotstoun 8083

McCreath Taylor & Co. 427-431, High Street, Kirkcaldy, Fife. Kirkcaldy 4744

Jack Olding & Co. (Scotland) Limited. Coupar Angus. Perthshire. Coupar Angus 173

Rickerby Ltd., 33. Botchergate, Carlisle. Carlisle 24165

McNeill (Engineering) Ltd.. 78. Duncrue Street, Belfast, N. Ireland. Belfast 745211

demonstrations.

sales, hire

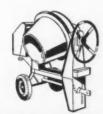
and service

for

BARFORD

DUMPERS MIXERS PUMPS







it's better by far to buy BARFORD



Track Marshalls

Better Batters - fast! That's the revolution Track-Marshalls have brought to motorway construction. Conventional trimming by drag line and hand has been out-dated as slow and costly. Fast-moving fine-grading Track - Marshalls are proving - often on 1 in 1 curved slopes - that their stability and excellent weight dis-

tribution give quicker, better results where other crawlers merely churn the topsoil.





LOW CENTRE OF GRAVITY The Track-Marshall hugs the ground. Its weight is evenly distributed.



A MIGHTY PUSH There's real might behind the Track-Marshall's blade — 13,000 lbs of sustained push.



PACT TOO Track-Marshalls can ride the dumpers — fast trans-portation meets and beats schedules!



KEPNOVING on Firestone



Firestone Nylon Earthmover tyres are built to keep construction jobs up to schedule. They have the extra traction and extra strength needed to speed up the work and reduce tyre costs. They cope with the toughest grading, construction or open cast mining operations.

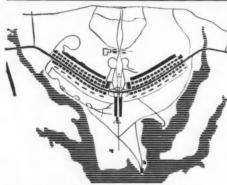
Firestone Nylon tyres give the greatest protection against damage because nylon cords, being tough and resilient, have greater resistance to heat and flexing fatigue and are highly resistant to impact and bruise damage. Nylon does not absorb moisture, so that nylon tyres are

immune to damage from water penetration. Firestone Nylon Earthmover tread designs give maximum traction in the worst conditions and are extra tough to resist cutting; double-thick sidewalls give added protection against cuts and snags.

There is a complete range of Firestone Nylon Off-the-Highway tyres specially designed for the many different types of Earthmoving equipment. They give more hours of operating life, they cut down-time and they increase your profits.







PLAN OF BRASILIA PLAN OF BRASILIA
This city in the interior, built to stimulate Brazil's prosperity,
has cost an estimated 345 million dollars. From a central
intersection the ultramodern planning extends to the president's
palace built on the shores of one of the largest man-made
lakes in the world.
Acknowledgements:
Structural Engineer:
Sergio Marques de Souza, Rio de Janeiro.
Contractors:
Construtors Rabello S.A., Rio de Janeiro
Wire supplied through:
Adams & Harvey Ltd., London and Associates in Brazil.

The words wire and Rylands have been synonomous in the building of countless new constructions all over the world. Its use in the erection of Brazil's new capital proved again that Rylands can meet any demand for standard and specialized high tensile wire needed in prestressed concrete projects everywhere. In one of the most daring concepts of architecture in this century, Rylands again upheld their reputation by supplying tons of high tensile steel wire for prestressing concrete beams in the city centre intersection flyover: and for the Tocantins Bridge, one of the largest single span prestressed concrete bridges in the world.

Whether your order for prestressing wire is large or small, consult Rylands.

RYLANDS

BROTHERS LIMITED WARRINGTON · LANCS



GUIDE TO AGGREGATES CONTRACTORS

REDFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Letecater, (Tel.: Coalville 1226/7/8: re LTD., near Letecater, (Tel.: Coalville 1226/7/8: re Letecater, State 1226/7/8: re Letecater, State 1226/7/8: re Letecater, Ltd.,
Little Paxton, St. Neots, Flunts.; and Blunham.

Bods.

ARR MAN. G. F. X., LTD. (See Bluckinghamshire.)

WES SAND AND GRAYEL CO., LTD., 22 The

Broadway, St. Ives, Hunts. (Tel.; St. Ives 2441/2/

3/4.) (See Huntingdonshire for details.)

Nottingham.

Nottingham.

Nottingham.

St. Nottinghamshire.)

WEB. G. CAMBRIDGE, 35 Magrath Ave., Cambridge,

(Tel. S9966, 53969, 50353 (night)). (See Camba.)

WINFIELD, HUNRY. LTD., Plx Farm Lane, Hemel

Hemmstead, Herts. (Tel.; Berkhamsted 1208/9.)

Pita at Leighton Duzard, Bedford. Buildings ands.

BERKSHIRE

BERKSHIRE

SARDON HILL QUARRIES (ELLIS AND EVERARD).
LTD., near Leicester. (Tel. Coalville 1226/178, or tondon's Vigilar 2. T.O. 12. Caville 1226/178, or tondon's Vigilar 2. T.O. 12. Caville 1226/178, or tondon's Vigilar 2. T.O. 126. High left. 18 Winchester. (Tel. 2264) (See Hampshire.) (OFF, HARRY A., LTD., Buckhurst Hill, Cheapside, Asot, Berks. (Tel.: Asot 1026/7.) Sand, all grades of washed aggregates. hardcore, clinker, sites and boggin. (Tel.: Asot 1026/7.) Sand and all grades of washed aggregates. Pits at Radiev, near Abingdon (Tel.: Abingdon 441). 261a Finchley R6, London, N.W. allongdon 441. 261a Finchley R6, London, N.W. allongdon 410. 261a Finchley R6, London 91a Fi

BRECKNOCKSHIRE

HASH ROCKS STONE AND LIME CO.. LTD..
Presteigne, Radnor. (Tel.: Presteigne 352.) (See
Herefordshire for details.)
SALOP SAND AND GRAVEL SUPPLY
Admaston, Weilington (Tel. 961), Salop.

BUCKINGHAMSHIRE

ASPNALTE CARPETS. LTD., 38 Buckingham Palace Road, London, S.W.1. (Tel.: Tate Gallery 4857 or Gerrards Cross 349.6) Pel.: Tate Gallery 4857 or Gerrards Cross 349.6 Manufacturers of all grades of gravel bitumen macadam, gravel asphalt and cold asphalt at Gerrards Cross. AND EVERARD). AND GARD CO. LTD. STRATON AND LONGON CO. LTD. STRATON AUGUST CO. (LTD., STRATON AUGUST CO.) LTD. STRATON AUGUST CO. (LTD., STRATON AUGUST CO.) Manufacturers and suppliers of all grades limestone. Bicster, Oxon. (Tel.: Stratton Audiev 391/2.) Manufacturers and suppliers of all grades limestone. Coff. HARPY A., LTD. Buckhurst Hill. Cheapside, Ascot. Berks. (Tel.: 1026/7.) (See Berkshire.) OANGERFIELD, F. I., A. CO., LTD., 261a Finchev Rd., London, N.W.3. (Tel.: HAMDStead B044/8.) AND CO. LTD. STRATON CO. (Tel.: Evelme 20 and 37.) London Office Grades Company Control of the Control of the Company Control of the Control of t

CAMBRIDGESHIRE

CAMBRIDGESMIRD

ARDON HILL QUARRIES (ELLIS AND EVERARD).
LTD., near Leicester. (fel.: Coalville 1226/7/8: or
LTD., near Leicester. (fel.: Coalville 1226/7/8: or
LTD., near Leicester. (fel.: Toalville 1226/7/8: or
LTD., 1200 Leicester. (fol.: Toalville 1226/7/8: or
LTD., 261A Finchiev
Rd. LD., K. J., Co., LTD., 261A Finchiev
Rd. LD., K. J., Co., LTD., 261A Finchiev
Rd. LD., K. J., Co., LTD., 261A Finchiev
Rd. LD., LD., 261A Finchiev
Rd. LD., 261A Finchiev

CAMBRIDGESHIRE

CAMBRIDGESHIRE

HOVERINGHAM GRAVELS, LTD., Hoveringham, Nottingham, (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

(For details, see Nottinghamshire.)

ACLAREN 560S, (KENNETT), LTD. gravel, tarred aravel, all to 8.5. Specifications, Delivered to any site. Station Rd., Kennett, Cambs. (Tel.: Kentlord 33314.)

51. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts, (Tel.: St. Ives 24441/2/3/4.) (See Huntingdonshire for details.) WEBS. G., CAMBRIDGE, 35 Magrath Ave., Cambridge, (Tel.: Cambridge S9956, 53959, 50353 (night).) (See Huntingdonshire for details.) WEBS. G., CAMBRIDGE, 35 Magrath Ave., Cambridge, (Tel.: Cambridge S9956, 53959, 50353 (night).) (See Huntingdonshire for details.) WEBS. G., CAMBRIDGE 35 Magrath Ave., Cambridge, (Tel.: Cambridge Huntingdonshire for details.) (See Huntingdonshire for details.

CARDIGANSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel: Presteigne 352.) (See Herefordshire for details.) SALOP SAND AND GRAVEL SUPPLY Admaston Weilington (Tel: 961), Saloo.

CARMARTHENSHIRE

JOHN WILLIAMS AND CO. (CRWBIN QUARRES), LTD., ROCK PRODUCTS (KIDWELL), LTD., both at a Queen Street, Carmarthen, Tol.; Car-marthen 7781, 7637, 7031). All grades aggregate. Tarmacadam. Lime. Road surfacing by specialists. Barber-Greene and roilers available.

CHESHIRE

CHESHIRE

BUCKTON QUARRY, broken stone, all grades. (Tel.: Mossley 12.3.) Or write Main Road, Oldham.

CASSETION 23.) Or write Main Road, Oldham.

CASSETION 23.) Washed sand and gravel.

CAWOOD, WHARTON AND CO., LTD., Pistyll Gwn Quarry, Lianarmon, near Mold. (Tel.: Lianarmon-yn-lal 27.) Crushed limestone and tarred macadam, all crades.

CHESHIRE

WHACADAM, CO., LTD., Lianarmon, near Mold. (Tel.: Lianarmon-yn-lal 43.) Hard, broken limestone, dry and coated, to 8.5.5. Inquiries to registered office—Market Chambers, Tower Square, Tunstall, Stoke-on-Trent. (Tel.: Stoke-on-Trent.

Staffs. (Tel.: Tean 39.3.) Manchester Office: Blackfriars 3766/7. Plant capacity, 2,000 tons per day.

DUNNING AND SON. LTD. (See Shropshire.)

HILTON GRAVEL, LTD., Rice Street, Liverbool Road, Manchester Cheedle, Staffs., Tel.: Tean 74.1.) And at Longton, Stoke-on-Trent. (Tel.: Longton, Stoke-on-Trent.)

HILTON GRAVEL (Tel.: Cheedle, Stoke-on-Trent. (Tel.: Cheedle, Stoke-on-Trent.)

HILTON GRAVEL (Tel.: Cheedle, Stoke-on-Trent. (Tel.: Cheedle, Stoke-on-Trent. (Tel.: Cheedle, Stoke-on-Trent.)

HILTON GRAVEL (Tel.: Cheedle, Stoke-on-Trent.)

HILTON GRAVEL (Tel.: Stoke-on-Trent.)

HILTON GRAVEL (Tel.: Stoke-on-Trent.)

HILTON GRAVEL (Tel.: Cheedle, Stoke-on-Trent.)

HILTON GRAVEL (Tel.:

Depot. Any quantity per day; immediate density of the variety of t

concreting sand. Plastering sand. Plant capacity:
2,000 tons per day.
WARDLOW LIMESTONE, LTD., Cauldon Low, N. Staffs.
(Tel.: Oakamoor 366.) (For details, see Staffs.)
WILLIAMS, C. F., LTD., Blahop Street Sand Quarry.
Turncroft Lane, Stockport. (Tel.: Stockport 7096.)
Building sand and concrete sand. Bulk sand and gravel filling a speciality.

CORNWALL

PENTEWAN DOCK AND CONCRETE CO., LTD., Pentewan Works, near St. Austell. (Tel.: Mevagisser 3335/6.) Gwithlan Works, near Hayle-piastering and asphalting sands, elvan and granite aggregates, all sizes

CUMBERLAND

BROOMBYS, LTD., Sandside, Milinthorpe (Tel. 3251/2), Westmorland. (See Westmorland.) ESK MANUFACTURING CO., LTD., Calsil Brickworks, Brisco, Cumberland. (Tel.: Carlisle 2-4941.) Sand lime bricks (common and coloured facings). Ex Brisco. Concreting aggregates ex Longtown Works (Tel. 365).

DENBIGHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel.: 961), Salop.

DERBYSHIRE

WARDLOW LIMESTONE, LTD., Cauldon Low, N. Staffe (Tel.: Oakamoor 366.) (For details, see Staffs.)

DORSET

BULL BROS., 5. and L. LTD., 126A High Street.
Winchester (Tel. 2264). (See Hampshire.)
DANGERFIELD, F. J. & CO., LTD., 261A Finchley
Rd., London, N.W.3. (Tel.: HAMpstead 8044/8.)
For all road aggregates, kerbs, setts. (See London.)
DORSET LIMESTONES, LTD., Bumpers Lane, Esston,
and bituminous macadam, foundation materials,
limestone for all purposes and to all gradings.
Portland stone aggregates and Portland capstone
aggregates for reconstructed stone. By road and see,
HALL AND CO., LTD., B Commercial Road, Parksons.
MOREYS (VERWOOD), LTD., Verwood, Wimborne,
Dorset, Tel.: Verwood 234.) Concrete aggregates
building sand, hoggin, path gravel.

ESSEX

Dorset. (Tel.: Verwood 234.) Concrete aggregates building sand, hoggin, path gravel.

ESSEX

ALRESFORD SAND AND BALLAST CO., LTD., Airesford Creek, near Colchester, Essax. (Tel.: Wivenhoe 341/494.) Pits at Airesford Creek, Brightlingsea, Stoke-by-Nayland, Bures and Holland, All grades of washed shinale, concreting the Concreting and Concreting and Holland, All grades of washed shinale, concreting the EakER, F. AND E., LTD., 73 High Road, Rayleigh, Essax. (Tel.: Rayleigh 1031/2.) Pits at Great Totham, Heybridge and West Tilbury. All grades of washed material supplied and delivered; also hardcore ashes and bricks. (LSS) AND EVERARD, LTD., near Leicester. Tel.: Coalville 1226/1/8. or London: ViGilant 2530.) (For details, see Leic.) BUCBRICKS COMPANY, LTD., Sand and Ballast Pits, Martells, Ardleigh, Colchester. (Tel.: Ardleigh 310.) All grades of washed aggregates, sand accurately graded to buvers' requirements. PANGERIELD, F. J. & CO., LTD., 2614 Finchey Rd., London, N.W.3. (Tel.: HAMpstead 8044/8.) For all goad gargates, kerbs, setts. (See London.) FERRIS PITS, LTD., the Limes, Garage, Fenceblete 3001/2.) Pits at Orsett, near Standord-le-Hoose, and Upminster. All grades of washed aggregates, plastering and building sand. Supplied and delivered, also hardcore. All grades of washed aggregates, plastering and building sand. HAMD Co., LTD. Manor Road, Romford. (Tel.: ALL AMD Co., LTD. Manor Road, Romford. (Tel.: Cowdham 3171—15 lines.) Graded washed stone, *sin to rejects: washed concreting sand and washed soft building sand. HAMD Co., LTD. Manor Road, Romford. (Tel.: Cowdham 3171—15 lines.) Graded washed stone, *sin to rejects: washed concreting sand sand washed soft building sand. Classified sand for asphalt. Ready mixed concreting sand and washed soft building sand. Classified sand for asphalt. Ready mixed concreting sand and washed soft building sand. Supplied and deliver all grades. Pits at Braintree 151 and 1351.) Graded washed stone, *sin the sand proposed sands, ballast and shingle, asphalt grits, grante aggr

49912/31/4.) Haulage, all aggregates end excavation.

RAAD, P. T., Fairlop Airfield, Forest Road, Ilford. (Tel.: Hainault 6111/2/3.) High-grade stands, ballast and shingles supplied and delivered:

T. ALBANS SAND AND GRAYEL CO., LTD., London Colney, St. Albans, Herts. (Tel.: Bowmansgreen 2271.) Pits at Meadgate Road, Nazeing; Station Road, Waitham Abbey.

St. NYES SAND AND GRAYEL CO., LTD., 22 The 241/2/31/4 and Haistead 2323.) Pits at St. Ives and Gosheid, near Haistead.

STANWAY CONTRACTS. LTD., Upper Edwards Hail, Eastwood, Southend-on-Sea. (Tel.: Eastwood Stift). Sand and gravel pits at Rochford and Woodham WIVENHOE SAND, STONE AND GRAYEL CO., LTD., Wivenhoe, near Colchester, Essex. (Tel.: Wivenhoe 231.) High quality washed aggregates of all grades.

GLOUCESTERSHIRE

GLOUCESTERSHIRE

GLOUCESTERSHIRE

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster. Herefordshire. (Tel.: Kingsland, 201/4.) (See details under Herefordshire.)

COKE, T. F., (CHELTENHAM), LTD., 257 Gloucester, Koad, Cheitenham. (Tel.: Cheitenham 4717/4874.)
Sand, graded gravel aggregates, hardcore, limestone, colopings, tarred and bituminous limestone, colopings, tarred and bituminous miestone. CROMHALL QUARRIES, LTD., Cromhall, Wotton-under-Edge, Glos. (Tel.: Faifield 346/7.) Concrete aggregates. pre-graded in large quantitles. Farmacadam, tarpaving, bituminous macadam and cold asphalt to 8.5.5 for hand ar machine laying. GRIFFITMS, A., AND SONS, Churchdown, Gloucester, (Tel.: Churchdown 3135 and 2216.) Pre, quarry and diredger owners. All grades and types and diredger owners. All grades and types that the control of the color of the c

and dredger owners. All grades and types and redger owners. Longmoor House, Ashton Vale Road, Bristol, 3 (Tel.: 63001). Gravel aggregates, concreting, plastering and building sand HOVERINGHAM GRAVELS, LTD... Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

NORTH WILTS. QUARRYING CO.. Noble Street, Sherston, Wilts. (Tel.: Sherston 321—3 lines.) (For details see entry under Wiltshire.)

SHAKEMANTLE QUARRY CO., LYD., Cinderfore, Glos. (Tel.: Cinderford 3197.) "Doura" Facine. Engineering and Common Bricks in terra-cotta red and golden brown. Concrete aggregates, rose-stones, and Dolomitic media.

TAYMAC, LTD., Wootton Bassett. mear Swindon, Wilts. (Tel.: Wootton Bassett 391—5 lines.) Cotswold stone, hardcore, washed and graded aggregates, building sand.

RE

N/ OL

1E

KE

M

ME

PE

GUIDE TO AGGREGATES CONTRACTORS'

GLOUCESTERSHIRE

WHITECLIFF QUARRIES AND BRICKWORKS, LTD. Coleford, Gios. (Tel.: Coleford 3158/9.) Tarred and bituminous limestone macadams, asphait, concrete aggregates, dolomitic media, engineering, facing and common bricks for all purposes. Delivery road or rail

HAMPSHIRE

HEREFORDSHIRE

HEREFORDSHIKE

BENGRY AND SONS, LTD., Longmoor, Kingsland,
Leominster, Herefordshire. (Fel.: Kingsland 301/4.)
Suppliers of all grades of crushed concrete aggregates, road metalling, pitching stone, hardcore and
costed macadam.

FLE HILL TRANSORT AND ROLLING CO., LTD.,
TRANSORT AND ROLLING CO., LTD.,
OVERINGHAM GRAYELS, LTD., Hoveringham,
Nottingham. (Fel.: Lowdham 3171—15 lines.)
(For details, see Nottinghamshire.)
Presteigne, Radnor. (Fel.: Presteigne 352.) All
grades of tarred and bituminous macadam, coadpresteigne, Radnor. (Fel.: Presteigne 352.) All
grades of tarred and bituminous macadam, coadpictuminous macadam, coadpictu whiteCliff Quarries AND BRICKWORKS, LTD., Coleford, Glos. (Tel. 3158/9.) (See Gloucestershire.)

HERTFORDSHIRE

HERTFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8: or London: ViGilant 2550.) for details, see Leices, 20 A Road. London, N.W.3. (Tel.: HAMpstead 8044/8.) For all road aggregates, kerbs, setts. (See London.)

BASTWOODS SALES, LTD. Eastwood House. City Road, E. C. 1. (Tel.: Clerkenwell 2040.) Broxbourne pit. (Tel.: Hoddesdon 2456.) Producers and tree. Hoddesdon 2456.) Producers and grader of washed aggregates. SASTEMENT OF A ROAD COLOR (Tel.: HOWard 4351/2/3.) Washed aggregates and building sand. Pits at Hertford and Enfeld.

MALL AND CO., LTD., Railway Yard, Orchard Road. Stevenage (Tel.: 775), and at Hatfield. Gravel MALL AND CO., LTD., Bailway Yard, Orchard Road. Stevenage (Tel.: 775), and at Hatfield. Gravel Color of the Color of

HUNTINGDOZISHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: ViGilart 253.0). (For details, see Leics, PERRERSAND AGGREGATES, LTD., Northambton Road Quarries Rushaden (23.7/5). (See Northants). BRAVEL PRODUCTS (HUNTS.), LTD., Little Paxton, St. Neots, Hutts. (Tel.: St. Neots 308.) Pits at Lettle Paxton, St. Neots, Hunts.; and Bunham, Beds.

Never Moverngham GRAVELS, LTD., Hoveringham, Nottingham. (Tel.: Lowdha n 317)—15 lines.) (For details, see Nottingham, hire.).

NENE BARGE AND LIGHTER CO., LTD., Market Chambers, Peterborough (Tel.: \$554/\$), and Ship End Quarries, Wansford, near Peterborough (Tel.: Wansford 384/\$). Roadstone, hardcore, broken stone, ballast, ashes, silica clay and sand.

HUNTINGDONSHIRE

87. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway. St. Ives, Hunts. (Tel.: St. Ives 2441/2/3/4.) Froducers of all grades of washed sand and gravel. Ready mixed concrete. Precast concrete of washer dearrighton. WEER, G., CAMBRIDGE, 35 Magrath Ave., Cambridge. (Tel 5996, 53958, 50353 (Injah)). (See Cambs.)

KENT

BRASTED SAND PITS, Brasted, Kent (Tel. 586).
London Office: 10A. Ellery Street, S.E.1.S. (Tel.:
London Sands, S.E.1.S. (Tel.: Sittingbourne, S.S.E.1.S. (Tel.: Dartford, S.S.E.1.S. (Tel.: Sittingbourne, S.S.E.1.S. (Tel.: Maidstone, S.S.E.I.S. (Tel

LANCASHIRE

LANCASIMED

BROOMEYS, LTD., Sandalde, Mlinthorpe (Tel. 2251/2), Westmorland. (See Westmorland.)

BUCKTON QUARRY, Broken stone, all grades. (Tel.: Mossley 123.) Or write Main Road, Oldham.

CASTLETON SAND AND GRAVEL QUARRIES, LTD.. Trows Lane, Castleton, near Rochdale. (Tel.: Bacup 287.) Washed pit sand, crushed washed control of the Castleton Sand, Crushed Washed CROXDEN GRAVEL, LTD.. Cheadle, Stoke-on-Trent, Staffs. (Tel.: Tean 393.) Manchester Office: Blackfrlars 3766/7. Plant capacity, 2,000 tons

Blackfriars 3/80:// rient Labestry, acute per day.

DUNNING AND SON, LTD. (See Shrooshire.)

HARTLEY, JOHN W. LTD.. Lundsheld Quarry, Carnforth, Larc.

Interpretation of the second state
Manchester, 3. (Tel.: Deansgate 5455 and 545-).

Quarries at Cheadle, Staffs. (Tel.: Tean 241.) And

HOVERINGHAM GRAVELS.

HOVERINGHAM GRAVELS.

ROUTINGHAM GRAVELS.

Nottingham Staffs.

Nottingham Staffs.

Nottingham Staffs.

Nottingham Staffs.

Nottingham Staffs.

Nottingham Staffs.

Hell-LAMD GRAVEL CO., LTD., Cheadle, Stoke-onTrent. (Tel.: Cheadie 2323/4, 2119 and 2195.)

Manchester Office: 464 Wilbraham Road, Choriton,

Manchester, 21. (Tel.: Choriton 2274/5.)

Waterbound macadams. Dry roadstone, sized and graded limestone aggregates. All to B.S. and

M. of T. Specifications.

PENMAEMMAWR AND WELSH GRANITE CO., LTD.,

all sizes and gradings of crushed granite aggregate. Immediate delivery ex stock.

Liverpool and Preston Depots.

(Tel.: Sefton Park 7261.)

Manchester Depot:

Office: Cornbrook Road, Manchester, 18

(Tel.: Trafford Park 3630.)

TERN HILL SAND AND GRAVEL CO., LTD.,

Almington Quarries, near Market Dravton, Staffs

TRENTHAM GRAVEL CO., LTD.,

Almington Quarries, near Market Dravton, Staffs

TRENTHAM GRAVEL CO., LTD., All sizes crushed or natural washed gravel. Twice washed sharp concreting sand. Plant capacity:

WIFFIRE LIMESTONE.

concreting sand. Plastering sand. Plant capacity: 2,000 tons per day. TD., Black Lane Quarry. WITHERS LIMESTONS, LTD., Black Lane Quarry. Carnforth (Tel.: Carnforth 327.) Graded limestone aggregate to 8.5.5., all sizes. Immediate delivery ex stock.

X.L. GRANITE (INGLETON), LTD., Head Offices. Claphan, via Lancaster. (Tel.: Claphan 318/9.) Works Tel.: Ingleton 231. All sizes and gradings of ingleton granter aggregate.

LEICESTERSHIRE

LEICESTERSHIRE

WANLIP GRAVELS, LTD., Wanlip Road, Systes,
Leicester. Any size or grading, scientifically
balanced ballars. All to 8.5.5. (Tel.: Systes
2227 and 2797.

WEAKE VALLEY GRAVELS CO., LTD., Melta
Mowbray, (Tel.: Pit—Rotherby 205 or head with
Mowbray, (Tel.: Pit—Rotherby 205 or head with
send, transit mixed concrete.

LINCOLNSHIRE

LINCOLNSHIRE

CONINGSBY SUPPLY CO., LTD., Registered OBac. The Broadway. Woodhall Spa, Lincs. (Tel.: Woodhall Spa 252.) Screened limestone, hardcore, pitchia, billing. flint. hoggin. Ex quarries or delivered. White of the control o

LONDON

LONDON

BARDON HILL QUARRIES (ELLIS AND EVERABB), LTD., near Leicester. (Tel.: Coalville 1226/7/8: g
LTD., near Leicester. (Tel.: Coalville 1226/7/8: g
BUCRICKS COMPA. V. J. (For details, see Life.)
BUCRICKS COMPA. V. J. (For details, see Life.)
Garden 0534.) All grades of washed aggregate, sand, building sand, asohalt, grit. Sterilised or sand accurately graded to buyers' requirement. COX. H., AND SONS. LTD.,
3 and accurately graded to buyers' requirement. COX. H., AND SONS. LTD.,
3 and accurately graded to buyers' requirement. COX. H., AND SONS. LTD.,
3 and accurately graded to buyers' requirement. COX. H., AND SONS. LTD.,
3 and accurately graded to buyers' requirement. COX. H., AND SONS. LTD.,
3 and accurately graded to buyers' requirement. COX. H., AND SONS. LTD.,
4 and pitching, granite kerb sond setts, felson quart as olther minerals by road or rail, or ex London Btot.
4 other minerals by road or rail, or ex London Btot.
5 of the proper land. Denset. (Tel.: Portland 2207/6) (felatils, see Dorset.)
6 ORINKWATER. W. (WILLESDEN), LTD. Dudde Hill Lane. Willesden, N.W.10. (Tel.: Gladiton 6a00/5). Pits: Rush Green. Denham. Busts. (Tel.: Denham 2241/2/3). Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham. Busts. (Tel.: Denham 241/2/3). Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham. Busts. (Tel.: Genham 241/2/3). Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham. Busts. (Tel.: Denham 241/2/3). Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham 241/2/3. Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham 241/2/3. Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham 241/2/3. Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham 241/2/3. Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Denham 241/2/3. Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Benner. Busts. (Tel.: Donam 2241/2/3). Also Staines Road, Hounison 6a00/5). Pits: Rush Green. Busts. Rush

MERIONETHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO. Admaston, Wellington (Tel. 961), Salop.

MIDDLESEX

CROSS GEO. C., AND CO., LTD., Uxbridge Bast Southall. (Tel.: Southall 2264/5/6.) Conscrib agoregates, hardcore, excavations, demol/font. ORINKWATER, W. W. (WILLESDEN), LTD., Stanb. Rd., Hounslow Hth., Middx. (Hounslow 6222/3) GABRIEL, C., LTD., Palmers Lane, Enfeld, Midds.

Rd. Hounslow Hth., Middx. (Hounslow 6222), GABRIEL, C. LTD., Palmers Lane, Enfeld, Midds. (Tel.: HOWard 4351/2/3.) Washed aggregates sit building sand. Pits at Enfeld and Hertford. GRENHAM SAND AND BALLAST CO., LTB. Chertsey Rosel Petham. (Tel.: Feltham 2285/7), Chertsey Houlow, Feltham. (Tel.: Feltham 2285/7), and perfect plastering and building sand. GRUNDCN, S., 100/104 Harlington Road, Hillington, Cream Committee (Tel.: Uxbridge 35511/2/3.) 374, bidligsex. (Tel.: Uxbridge 35511/2/3.) 374, bidligst, phartocre, ashes, excavation and demovition.

demo'ition.

ALL Ail Co., LTD., Chantrev House, Eccleter
Street, S.W.1 (Tel.: Sloane 7122), and all Ashlori
and Brentford. Pits: Bedont and Sheppetide.
Gravel aggregates, concreting, plastering and
huilding sand.

hullding sand.
LONDON BALLAST CO., LTD. (Tel.: Paddington 5064).
155A Parchester Terrace North, Paddington, W.2.

61

System, tifically System

Meiten id office tes and

Castle-Barton , road-

Office: orough: t Lang-Deeping regules. LTD., in. Sole 7 Way:

ingham, lines.)

Grimsby
Caistor,
g sand:
aterials,
dylands,
Deeping
adds of
thants.)
LTD.,
Pits al
Market
and and
mixed

(7/8; are Léics.)
nambers.
Covent
pregates,
isad dry
rements

Finchler Granite izes and sartz and on stock. Easton, 8.) (For

Dudden
Adstone
ks. (Tel.:
founslow/3.)
Middx
ates und
rd.
LYB..
2285/7.)
Concrete

Eccleston at East al aggre-ng sand. sand to

Epping.

on 5064), ton, W.2. al Green. s, ballast an ready est Road. s.) indertord. "Facins. prra-cotta.

Y CO.

concrete con

Hillingdes. 3.) 52' 6, ration and Eccleston at Ashford hepperton pring and

ton 5064), gton, W.2.

CONTRACTORS' GUIDE TO AGGREGATES

MIDDLESEX

MINIMENTAL GRAVEL CO. LTD., Feitham Hill Road, Hanworth. (Tel.: Feitham 2636.)

RIAD, Feitham 2636.

RIAD, Fe

MID-WALES

SENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Heretordshire. (Tel.: Kingsland 301/4.) (See details under Heretordshire.) NASH ROCKS STONE AND LIME Prestegine, Radnot. (Tel: Prestegine 3.2.) (See

Presteigne, Radiot. (Tel., Presteigne S., (See Herefordsnire for details.)

OLD RADNON INADING CO., LTD. Quarries in Radnorshire. (Tel., Kington 421.) (See Hereford-

Radnorshite. (fel: Kingdon 421.) (See Freeholds.)
SALOP SAND AND GRAVEL SUPPLY CO.,
Admaston, Wellington (fel: 961), Salop.
IERN HILL SAND AND GRAVEL CO., LID.,
Almington Quarries, near Market Drayton, Staffs.
(fel: Hales 261/2/3.) (See Staffs. for details.)

MONMOUTHSHIRE

MONMOUTHSHIRE ASSOCIATED QUARRIES, LTD., read Othce: 3d Chepstow Road, Newbort, Mon. (1eli: Newbord, 1931). The read othce of the read of

MONTGOMERYSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presseigne, Radnor. (Tel.: Presteigne 552.) (See Herefordshire for details.) SALOP SAND AND GRAVEL SUPPLY CO., Admaston. Wellington (Tel. 931), Salop.

NORFOLK

NORFOLK

RADON HILL QUARRIES (ELLIS AND EVERARD),
LTD., near Letrester. (Tel.: Coalville 1226/7/8: or
London: VIGilant 2530.) (For details, see Leics.)
JONNSON, P. C. H., LTD., Station Road, Ferrington
St. Clement, near King's Lynn. (Tel.: Terrington
St. Clement, aear King's Lynn. (Tel.: Terrington
St. Clement, 246.) Washed and screened gravel
St. Ives SAND AND GRAVEL CO., LTD., 22 Tne
Broadway, St. Ives, Hunts. (Tel.: St. Ives
2441/2/3/4 and Coney Weston 12.) Pits at
St. Ives and Knettishall, near Thetford.
NITIERTON STONE QUARRIES, LTD., Pix Farm
LTD. (Tel.: Norwich 33243/4.) Washed and graded
INORFE GRAVEL PITS. LTD., Harvey Lane, Norwich
(Tel.: Norwich 33243/4.) Washed and graded
of Norlolk and Suffolk.

NORTHAMPTONSHIRE

ARDON HILL QUARRIES (ELLIS AND EVERARD), ITD., near Leicester. (Tel.: Coalville 1226/7/8. or London: ViGliant 2530.) (For details, see Leics.)

BLESTER STONE CO., LTD., Stratton Audiev Blester, Oxon. (Tel.: Stratton Audiev 391/2.)

Manufacturers and suppliers of all grades limestone, Larmacadam, dry, pitching stone, hardcore, etc.

Aramacadam, dry, pitching stone, hardcore, etc.

BARMACH, All grades of washed and graded aggregates to B.S.S., building sand, hardcore.

DWHMAC (PRODUCTS), LTD., Tallington, Stamford All grades of washed sand and gravel. (Tel.: Market Deepling 2301.)

DOW-MAC (PRODUCTS), LTD., Tallington, stammore all grades of washed sand and gravel. (Tel.: Market Deeping 2301.)

DUSTON STONE GUARRIES, LTD., New Duston, Northampton. (Tel.: Birkworth 278 and 298.

Duston SOS.) Producers of building and walling stone roadstone, hardcore, broken stone, ashes, sand, gravel and hoggin. Immediate delivery sand, gravel and hoggin. Immediate delivery farRERSAND AGGREGATES, LTD., Northampton Road Quarries, Rushden, Northamts. (Tel.: Rushden 2354/S.) Largest producers in the county of all grades of high-quality concrete aggregate to B.S.S. Deliveries throughout Northamptonshire and adhaling counties.

2354/5.) Largest producers in the country of all mades of high-quality concrete aggregate to 6.5.5. and adding counties of the country of all mades of high-quality concrete aggregate to 6.5.5. and adding counties of the country of all mades of high-quality concrete aggregate to 6.5.5. and adding counties of the country
NORTH WALES

CAWOOD, WHARTON AND CO., LTD., Pistyll Gwyr Quarry, Llanarmon, near Mold. (Tel.: Llanarmon-yn-lai 27.) Crushed Ilmestone and tarred macadam, all grades

yn-1ai 27., Crushed Ilmestone and tarred macadam, all orades ND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-1ai 43.) Hard, broken Ilmestone, dry and coated to 8.5. Inquiries to Registered Office—Market Chambers, Tower Trent 88094. Stoke-on-Trent. (Tel.: Champair 297/8.) All sizes crushed, washed rationary and gravet. Highest quality. Precast concrete products, ex our Griffiths Crossing Factory. Caernarvon. (Tel.: Caernarvon 2535/6.) Crushed granite ex our quarry. Pengwern and Gwydry Quaries, Ltd., Trefriw, Llanrwst, Denbighshire. (Llanwst 38.) GWALCHMAI GRANITE QUARRY, Anglesey. Porpietors: The North Wales Construction Co., Ltd. (Tel.: Gwalchmai 292.) All sizes dry and coated granite materials, hardcore, hiling, ready mixed concrete. etc.

(Tel.: Gwaichmai 1922). All sizes dry arocade granite materials, hardcore, hiling, ready mixed concrete, etc.

PENMAENMAWR AND WELSH GRANITE CO., LTD.
Quarries at Penmaenmawr (Tel. 2256/8), and at Trevor (Tel.: Clynnogfawr 223), Caernarvonshire.
All sizes and gradings of crushed granite aggregate. Any quantity per day; immediate delivery ex stock. Coated granite also available.

RUHIN AND DENBIGH TARMACADAM CO., LTD.
Carbonate of lime, tarmacadam, etc. Also inquiries to Lut Bros., Ltd., Gazette Buildings, 168 Corporation Street, Birmingham (Tel.: Central 7408), and Lunt Bros., Ltd., Stourbridge (Tel. 5201—8 ilines).

FERN. HILL SAND AND

8 lines).
RN HILL SAND AND GRAVEL CO., LTD.,
Almington Quarries, near Market Drayton, Staffs.
(Tel.: Hales 261/2/3.) (See Staffs, for details.)

NOTTINGHAMSHIRE

NOTTINGHAMSHIRE

AIZLEWOOD, DOUGLAS E., Bow Bridge, Rotherham. (Tel.: Rotherham 2622.) Crushed and graded limestene; all grades of washed gravel and sands.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London: ViGilant 2530.) (For details, see Leics.)

GLEN QUARRIES, LTD., Central Cnambers, Wellgate, Rotherham (Tel.: Rotherham 5223.) Crushed and graded stone, concreting sand, building sand, collected ex quarry or delivered.

GUNTHORPE GRAVELS (1958), LTD. (Tel.: Nottingsham, 77357; and Works: Lowdham 2131.) (An associate company of T. C. Cambbell, Ltd.) All grades washed gravel and sand to 8.5.5.

HOVERINGHAM GRAVELS, LTD., Hoveringham, Nottingham, (Tel.: Lowdham 3171—15 lines.) Quarries at Hoveringham, Holme Pierrepont, Curries at Hoveringham, Holme Pierrepont, Chroughout the country—deliveries in 21 counties, All grades of washed gravel and sand to any specification. Crushed quartzite for surface dressing of roads a speciality. Combined plant capacity 20,000 tons per day.

NEWARK GRAVEL AND CONCRETE CO., LTD., Grove St., New Balderton, Newark, Notts. (Tel.: North, Norts.) GRAVEL CO., LTD., Belimoor, Religion of North Norts.

gates.

NORTH NOTTS. GRAVEL CO., LTD., Bellmoor.

Retford, Notts. (See Yorkshire.)

SALISBURY AND WOOD, LTD., Matlock.
272/273.) (For details, see Derbyshire.)

OXFORDSHIRE

OXFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD),
LTD., nea: Leicester. (Tel.: Coalville 1226/7/8; or
London: ViGilant 2530.) (For details, see Leica.)
BENGRY AND SONS, LTD., Longmoor, Kingsland,
Leominster. Herefordshire. (Tel.: Kingsland
Jonathy (Tel.: Stratton Audley 391/2.)
BICESTER STONE CO., LTD., Stratton Audley,
Bicester, Oxon. (Tel.: Stratton Audley 391/2.)
Manufacturers and suppliers of all grades limestone,
Bicester, Oxon. (Tel.: Stratton Audley 391/2.)
Manufacturers and suppliers of all grades limestone,
Bicester, Oxon. (Tel.: Stratton Audley 391/2.)
Manufacturers and suppliers of all grades limestone,
Bicester, Oxon. (Tel.: Stratton Audley 391/2.)
Manufacturers and suppliers of all grades limestone,
Botley Works, Oxford
Washed aggregates. Pits and Radley, near Ablingdon.
(Tel.: Abingdon 441.)
DANGERFIELD F. J., AND CO., LTD., 261A Finchley
Road, London, N.W. S. (Tel.: HAMpsited 8044/8.)
For all road aggregates, kerbs, setts. (See Londen.)
DUSTON STONE QUARRIES, LTD., New Duston,
Northampton. (Tel.: Brixworth 278 and 298;
Duston 505.) (See Northamptonshire.)
GRUNDON. S. (EWELME), LTD., Ewelme, Oxon.
(Tel.: Ewelme 20 and 37.) London Office (Tel.:
Uxbridge 36511/2/3). All grades washed aggregates,
Tel.: S0458.)
HAINES, H., (WITNEY), L1D., Oxford Road, Witney.
(Tel.: Witney 42.) All grades washed aggregates.

(Tel. 50458.)

HAINES, H., (WITNEY), LID., Oxford Road, Witney. (Tel.: Witney 42.) All grades washed aggregates, hardcore, pitching and broken stone, Cotswold building and wailing stone.

HOVZRINGHAM GRAVELS, LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

SNETIERTON STONE QUARRIES, LTD., Pix Farm Lane, Hemel Hempstead, Herts. (Tel.: Berkhamsted 1208/9.) Roadstone, Cotswold building and wailing stone.

RADNORSHIRE

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire, (Tel.: Kingsland 301/4.) (See details under Herefordshire, Cleic Hill TRANSPORT AND ROLLING CO., LTD., Ludiow, Salo Ciclerhilistone 284). (See Shrops.) NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radion, (Tel.: Presteigne 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD. Quarries in Radnorshire. (Tel.: Kington 421.) (See Herefordshire.)
SALOP SAND AND GRAVEL SUPPLY CO.,
Admaston, Wellington (Tel.: 961), Sales.

RUTLAND

RUTLAND

GIBBONS, F. B., AND SONS, LTD., Welby House, Market Deeping, Peterborough. (Tel.: Market Doesing 3321/2383.) (Sae Lisaosinshire for details, MoveRINGFAM GRAVELS, LTD. rioveringnam, LTD. rioveringnam, CFO (Co.) (Prop. Andrew's Garage), KETION SIONE CO. (Prop. Andrew) Garage, KETION SIONE CO. (Prop. Andrew) Garage, Market Deeping Co. (Prop. Andrew) (Prop. Sione Co.)
SHROPSHIRE

SHROPSHIRE

SALLIDON QUARRIES, LTD., Bailidon, near Ash bourne, Derbyshire. (Tel.: Parwich 201 and 202.) Clean and graded dry limestone to B.5. all sizes coated limestone to B.5. 802 and 1621 and wet mix: large output: reliable deliverles.

SENGRY AND SONS, LTD., Longmoor, Kingsland, Sol. (See details under Herefordshire.)

CIEE HILL TRANSPORT AND ROLLING CO., LTD., Ludiow, Salos. (Tel.: Cleehilistone 284.) Granite stone, tarmac, chippings, filter media, settalimestone, crushed and walling stone, gravel.

DORRINGTON SAND AND GRAVEL QUARRIES. near Shrewsbury. (Tel.: Dorrington 276.) Supplies of ready mixed concrete, building sand, washed and crushed gravel.

DUNNING AND SON, LTD., Haughmond 20617.) All grades of high-quality roadstone, concrete aggregates and coated macadam. All to B.5.S. Any tonnace available for immediate delivery.

NASH ROCKS STONE AND LIME CO., LTD., Fresteigne, Radon, (Tel.: Presteigne, 352.) ISsee Herefordshire.)

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel.: 961). Salop.

TEN MILL SAND AND GRAVEL CO., LTD., Kington (Tel. 421.) (See Herefordshire.)

Admaston, Wellington (Tel.: 961). Salop.

TERN MILL SAND AND GRAVEL CO., LTD., Kington (Tel. 421.) (See Herefordshire.)

Almaston, Wellington (Tel.: 961). Salop.

TERN MILL SAND AND GRAVEL CO., LTD., Kington (Tel.: 91). Salop. (Tel.: 91). Gravel Co., LTD., Lordsley Quarries, Willingshiridge, near Market Drayton, Salop. (Tel.: 91). Gravel Concreting sand. Plastering sand. Plant capacity.

SOMERSET

SUMERSE I

SHAM QUARRY CO., LTD., Chantry, Frome. (Tel., Nunney 351.) All sizes limestone block, broken and aggregates. Farred and bituminous macadam and aggregates. Farred and bituminous macadam All Co., LTD., 216. Finchier Rd., London, N.W.S. (Tel.: HAMpstead 8044/8.) For all road aggregates, kerbs, setts. (See London, MALL AND CO., LTD., Longmoor House, Ashton Vale Road, Bristol, 3. (Tel. 63001.) Gravel aggregates, NORTH WILTS. QUARRYING CO., Nobol Street, Macadam Co., Macadam Co., 165. Septon Mallet, Coated basalt, concrete aggregates, filtering media, building blocks and slabs.

SOUTH SCOTLAND

ESK MANUFACTURING CO., LTD., Cumberland. (Tel.: Carlisle 2-4941.) (For details, see Cumb.)

SOUTH WALES

AMALGAMATED AGGRECATES, LTD., 97 Cowbridge
Road East, Cardiff, Tele: Cardiff, 25249.) All
Road East, Cardiff, Cardiff, Cardiff, Bridgend, Pontypridd,
Hall AND CO., LTD., 34 riigh Street Narberth
(Tel 74.) AWR AND WELSH, GRANITE CO., LTD.,
PENMEACHNAWR AND WELSH, GRANITE CO., LTD.,
and gradings of crushed granite aggregate from
our Cardiff and Swansea Dock Depots. Dolomite
aggregates from Ewenny Quarry, Bridgend,
CTel: Bridgend 3786.) Coated stone also available.
SESSIONS AND SONS, LTD., West Dock, Cardiff,
Producers of coarse and fine aggregate, dredged
and graded to British Standards, Branches Newport
SHAKEMANTLE QUARRY CO., LTD., Cinderford,
Glos. (Tel: Cinderford 3197.) "Doura" Facing,
Engineering and Common Bricks in terra-cotta,
red and golden brown. (See Glos.)
SOUTH WALES SAND AND GRAVEL CO., LTD.,
Head Office: P.O. Box S., Beaufort Buildings,
Swansea. (Tel.: Swansea S3071.) Sand and gravai
merchants, buildevs merchants, Pennant Quarry
clinker filter media. Depots: Cardiff, Newport
Earry, Pert Talbet, Briten Ferry, Swansea, Llanelly
STAFFORDSHIRE

STAFFORDSHIRE

EALLIDON QUARRIES, LTD., Ballidon, near Ash-bourne, Derbyshre, (Tel.: Parwich 201 and 202.), Clean and graded dry limestone to B.S.S., all alzes: coated limestone to B.S. 802 and 1621 and wee-mix; large output: reliable deliveries. BARDON MILL QUARRIES (ELLIS AND EVERARB), LTD., near Loicetter, (Tel.: Coalville 1226/7/8; st CROXDEN GRAVEL LTD., Cror details, see 4cco. CROXDEN GRAVEL LTD., Clean Stoke-on-Trent, Staffs, Tel.: Tean 303, Managed Stoke-on-Trent, Blackfriars 3766/7. Plant capacity 2,000 tens oer day.

Blackfriars 3700/7. Plant capacity 2,000 tens our day.

DUNNING AND SON, LTD., Wood End Gravel Pita, Hednesford, (Tel.: Hednesford 302/325.) Washed sand and gravel. All to B.S.S. High-quality readstone, concrete aggregates and coated macadam from our Haughmond Quarry, near Shrewsbury.

HIGH GRANEL. LTD., Cheadle, Staffs. (Tel.: The Common Comm

CONTRACTORS GUIDE TO AGGREGATES

STAFFORDSHIRE

4ULLAND GRAYEL CO., LTD., Cheadle, Stoke-on-Trent, (Tel.: Cheadle 2323/4, 2119 and 2195.) Manchester Office: 654 Wilbraham Road, Chorlton, Manchester, 21, (Tel.: Chorlton 2274/5.) KEVIN LIME CO., LTD., Oakamoor, Staffs, (Tel.: Oakamoor 385-386.) Clean graded dry Ilmestone, ail to B.S.S. sizes, Output 1,000 tons per day. RUGELEY GRAYEL CO., LTD., Rugeley Quarries, Rugeley, Staffs, (Tel.: Rugeley 251/2.) Entirely modern plant. Sand classifiers, Finest aggregates to B.S.S. Larce output.

modern plant. Sand classiners. Fines again to 8.55. Larpe output.

SALSBURY AND WOOD, LTD., Matlock. (Tel. 272/273.) (For details, see Derbyshire.)

SHIRE OAK GRAVELS, LTD., Lichheld Road, Walsall Wood, Staffs. Wasned crushed gravel and washed sand (Tel.* Brownnills 3253.)

IERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tel.; Hales 261/2/3.) Pit sand, concrete sand, and all grades of washed crushed gravel. Hardcore, cliptone a sahes and hoggin.

clinkers, aches and hoggin

TRENTHAM GRAVEL CO., LTD., Lordsley Quarries,
Willoughbridge, near Market Drayton, Salop, (Tel.)

Pipe Gate 304/5). All sizes crushed or natural
washed gravel. Twice washed sharp concreting
sand, Plastering sand Plant capacity 2,000 tons

MARDLOW LIMESTONE. LTD., Cauldon Low, N. Staffs. (Tel.: Opkamoor 366.) Graded limestone for all outroopses. Ground limestone. WINDMILL SAND AND GRAVEL QUARRIES, LTD., Cannock Road, Wolverhampton. (Tel. 31108.) Concrete aggregates, plastering, building and asphalt sand. All to B.S.S.

SUFFOLK

Alresford SAND AND BALLAST CO., LTD., Alresford Creek, near Colchester, Essex, (Tel.; Wivenhoe 341/494.) Sulfok area pits at Bures and Stoke-by-Nayland. All grades washed aggre-

gate sand: also hoodin
SARDON HILL QUARRIES (ELLIS AND EVERARD).
TD, near Leicester. (Tel.: Coalville 1226/7/8; or
London: ViGilant 2530.) (For details, see Leics.)
7ICKERSON. M. (CONTRACTORS), LTD., Gloucester
Street, Cambridge (Tel:: Cambridge 59973/4.)

Street. Cambridge (Tel.: Cambridge 56973/4.)

Street. Cambridge (Tel.: Cambridge 56973/4.)

HALL AND CO., LTD., West End Road, Ibswich AND CO., LTD., West End Road, Ibswich CTel.: Ibswich 55953/4.) Pits at Kesprave and Homersheld, near Harleston. Gravel aggregates, voncering plastering and building sand Kennett Cambs. (Kentford 333/4.) (See Cambs.)

17. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. ives, Hunts. (Tel.: St. Ives 7441/2/3/4. Conev Weston 12 and Halstead 2323.) Pits at St. Ives, Knettishall, near Thetford, and Gosfield, near Halstead.

THORPE GRAVEL PITS, LTD., Harvey Lane, Norwich (Tel.: Norwich 33243/4.) (See Norfolk.)

WEBB G. CAMBRIDGE. 35 Magrath Av., Cambridge (Tel.: 59966, 53969, 50353 (night)). (See Cambs.)

SURREY

OFF, HARRY A., LTD., Buckhurst Hill, Cheapside Ascot, Berks, (Tel. 1026/7.) (See Berkshire.)

Ruledd nr. Farnham, Surrev. (Tel.: Runfcld 2020.) Producers and distributors of all grades of washed aggregates.

MALL AND CO. LTD., Victoria Wharf, Crovdon. (Tel.: Crovdon 4444.) Other main depots at Coulsdon, Ebsom, Mitcham, Oxted, Purley, Redhill, Tadworth and Woking. Pits at Send and Redhill. Gravel aggregates, General Coulsdon, Colon, Mitcham, Oxted, Purley, Redhill, Tadworth and Woking. Pits at Send and Redhill. Gravel aggregates, General Coulsdon, Colon, Colon

MARCO (CROYDON), LTD., Hampton Road, West Croydon. (Tel.: THOrnton Heath 4236/7/8.) All

Crovdon. (Tel.: THOrnton Heath 4236778.) All building and road aggregates.

I'W ullding and road aggregates.

I'W under the thornton Heath 4236778.) Government Road. Ash Vale. (Tel. 2349.)

WELLS, A. L., AND SON, LTD., Builders' Merchants, Garlands Road, Leatherhead. (Tel 30189.) Sand aggregates, hardcore, ashes, cement. Clinker block manulacturers.

manufacturers.
NTON, WM. R., LTD., Send, Woking. (Tel.
Ripley 2454/5.) All grades sand, shingle, ballast
hoggin and ashes. Clinker block manufacturers

SUSSEX

SUSSEX

AVANN. F., Cavendish Avenue, Eastbourne. (Tel. 4969/70.) Washed and graded ballast, sand, bricks, breeze and concre'e blocks, hardcore, clinker, tarmac etc. supolition of the blocks, hardcore, clinker, tarmac etc. 300/16.16 Chapel Road, Worthing, 100/16.16 Chapel Road, Worthing, 100/16.16 Chapel Road, Worthing, 100/16.16 Chapel Road, Worthing, 100/16.16 Chapel Road, Eastbourne, Horsham, Hove and Seaford, Pits at Washington, Crumbies, near Eastbourne, Chichester, Rive Harbour, Midhurst, Shoreham and Portslade, Eastbourne, Chichester erecision-mixed concrete.

HARRIS, M. P., AND CO., LTD., West Station Goods Yard, Beshill (Tel. 61): Cavendish Place, Eastbourne (Tel. 3800); Dominion Road, Worthing (Tel. 8822); Whithread Lane, Northing (Tel. 5822); Whithread Lane, Northing (Tel. 5822); Whithread Lane, Northing (Tel. 5822); Whithread Lane, Northing (Tel. 750); Crawley Road, Horsham (Tel. 3368); The Hornet, Chichester (Tel 4181). All grades aggregate, hardcore, clinker, ashes, etc.

WRIGHT, C., AND SONS, (8*TON), LTD., 19 Bristol Gardens, Brighton, 7. (Tel.: Brighton 63357 and 62406.) All-in ballast, washee and crushed shingle, sand, ashes, hardcore, chalk, bricks, etc.

WARWICKSHIRE

WARWICKSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Ashbourne, Derbyshire, (Tel.: Parwich 201 and 202.)
Clean and graded dry limestone to B.S. So., all sizes, coated limestone to B.S. So2 and 1621 and wetamix, large output reliable deliveries.
DUSTON STONE QUARRIES, LTD., New Duston, Northambton, (Tel.: Brixworth 278 and 298; Duston DOO, LTD. 188 Lichheid Road, Four Oaks, M. Sutton Coldheid, (Tel.: Four Oaks 356.) Gravel aggregates, concreting, plastering, building sand.
HOVERINGHAM GRAVELS, LTD., Hoveringham, Nottingham. (Tel.: Lowdham 3171—15 lines.)
(For details, see Nottinghamshire.)
[JUDKINS, LTD., Granite Quarries, Tuttle Hill, Nuneaton, Tel.: Nuneaton 3411—10 lines.) All additional mous macadam. Slab mix a speciality, KEVIN LIME CO., LTD., Oakamoor, Staffs. (Tel.:

KEVIN LIME CO., LTD., Oakamoor, Staffs. (Tel.: Oakamoor 385/386.) Clean graded dry limestone, all to B.S.S. sizes. Output 1,000 tons per day.

all to 8.5.s. sizes. Output 1,000 tons per day.

**MAKEMANTLE QUARRY CO., LTD., Cinderford,
Glos. (Tel.: Cinderford, 3197.) "Doura" Facing,
Engineering and Common Bricks in terra-cotta,
red and poliden brown. (See Glos.)

**SHIRE OAK GRAVELS, LTD. (See Staffordshire.)

**WARDLOW LIMESTONE, LTD., Cauldon Low, N. Staffs.
Tel.: Oaksmoor 366.) (For details, see Staffs.)

**WARWICKSHIRE QUARRIES, LTD., Bedworth Road,
Nuneaton. (Tel.: Coventry 67821.) Red shale,
screened for roads, cm. surfs., anorts grounds,
tennis courts, etc., attractive colour.

WESTMORLAND

BROOMBYS, LTD., Sandside, Miinthorpe, Westmorland. (1el.: Miinthorpe 3251/2.) All gradem washed crushed gravel sand, limestone, granite chippings, pitching, tarmacadam, rockery stone, etc. ESK MANUFACTULING CO.. LTD., cumberland (Tel.: Carlisle 2-4941.) (For details, see Cumb.)

WILTSHIRE

BULL BROS., S. AND L., LTD., 126A High Street, Winchester. (Tel. 2264.) (See Hampshire.)

Winchester. (Tel. 2264.) (See Mamoshire.)
COKE, T., F. (CHELTENHAM), LTD., 257 Gloucester
Road, Cheltenham, Tel.; 4717/4874.) (See Glos.)
DANGERFIELD, F.J., AND CO., LTD., 261A Finchter
Road, London, N.W.S. (Tel.: HAMpstead 8044.8.)
Foal ill road aggregates, kerbs, setts. (See London.,
HOVERINGHAM GRAVELS, LTD., Hoveringham,
Nottingham, (Tel.: Lowdham, 3171—15 (Ines.)
(For details, see Nottinghamshire.)

WILTSHIRE

MOREYS (VERWOOD), LTD., Verwood, Wimbone, Dorset, (Tel.; Verwood, 23.4), Concrete aggregate, building sand, hoggin, path gravel.

NORTH WILTS. QUARRYING CO., Noble, Street Sherston, Wilts. (Tel.; Sherston 321—3 lines), Building and terrace walling stone, crazy pawing and stone roofing tiles.

ITM TABL. LTD., Wootton Bassett, near Swindow, Cotswold stone, hardcore, washed and grade aggregates, building sand

WORCESTERSHIRE

WORCESTERSHIRE

BALLIDON QUARRIES, LID., Ballidon, near An bourne, Derbyshire, (Tel.: Parwich 201 and 202). Clean and graded dry limestone to B.S.S., all files, coated immestone to R.S. 802 and 1621, and the mix: large output; rel'able deliveries. BEINGRY AND SONS, LID., Longmoor, Ringsland (See Bell) and the coated limestone to R.S.S., Lib., Longmoor, Ringsland (See Getails under Hite. Tel.: Kingsland 301/4). (See Getails under Hite. Tel.: Kingsland 301/4). CLEE HILL TRANSPORT AND ROLLING CO., LID., Ludlow, Salop. (Cleehillstone 284.) (See Shross). DUNNING AND SON, LTD., Hoveringham, Mottingham. (Tel.: Lowdiam 317—15 lines). Hoveringham and See Shrossing and Control of the Control of th

YORKSHIRE

SUBSCRIPTION ORDER FORM

To THE CONTRACT JOURNAL CO. LTD., 32 SOUTHWARK BRIDGE ROAD, LONDON, S.E.I

Please forward "THE CONTRACT JOURNAL" each week for which

SUBSCRIPTIONS

per year, post free

£2 - 12 - 0

half-yearly, post free Payable in Advance

I/we enclose £..... Name

(BLOCK LETTERS) Full postal address

Occupation Business

(For Readership Classification Purposes Only)

THE INDEX TO DISPLAYED ADVERTISEMENTS WILL BE FOUND ON PAGE 684

London: Printed and published by the Proprietors, The Contract Journal Company, Ltd., 32 Southwark Bridge Road, S.E.I. Thursday, August 10, 1961. Registered at the General Post Office as a newspaper.

961

ES

ngsland, 301/4.)

Shrops.) ringham, lines.)

mestone, ier day iTD., 2.) (See Kington

ingham, lines.)

.1.

The day
that
the rains
came
down

It is reported that when Noah heard the rain beating down on the roof he said: "Ark!" In these days he would say: "John Smith protective covering-quickly!"

We can provide a wide range of weatherproof canvas products to meet every storm contingency-even "40 days and 40 nights."

JOHN SMITH

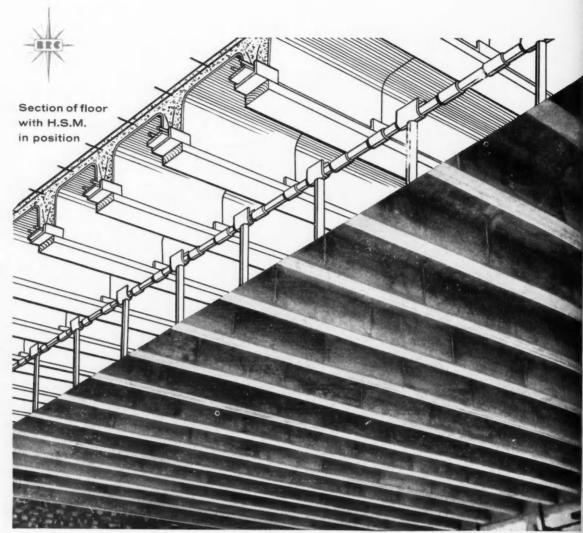
TARPAULINS . SHELTERS . COLLAPSIBLE LORRY TILTS

with immediate delivery



JOHN SMITH & CO. (LONDON) LTD. Hainault Works, Hainault Rd, Chadwell Heath, Romford, Essex. Seven Kings 6070 (10 times)

Branch Office & Works: Lower Holmes Street, Cadoxton, Barry, Glam. Telephone: Barry 2572



Section of floor with moulds removed



hollow steel mould construction

... is particularly suitable where the live loads are light, and long spans with few intermediate beams are desirable.

The BRC Booklet "Hollow Steel Mould Construction" is available on request.

THE BRITISH REINFORCED CONCRETE ENGINEERING CO. LTD., STAFFORD

London, Birmingham, Bristol, Chelmsford, Leeds, Leicester, Liverpool, Manchester, Newcastle, Cardiff, Glasgow, Dublin, Belfast, Bulawayo, Calcutta, Johannesburg, Singapore, Vancouver.

Export Sales: 54 Grosvenor Street, London W.I.

